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seen during the same time period: (a) 180 persons presenting for reasons other than dog bites (b) 121 persons presenting with nondog bite injuries and (c) 126 persons presenting with non-injury conditions. Persons with conditions having known associations with gender were excluded from each control series.

Results ORs comparing males to females were (a) OR 0.8, 95% CI 0.5 to 1.3, (b) OR 0.6, 95% CI 0.4 to 1.0 and (c) OR 1.2, 95% CI 0.7 to 1.9).

Conclusion Our results do not support a hypothesis of a higher dog bite risk for males. We discuss them in the context of the type of injury under consideration, the different research questions implicit in each choice of control group and potential bias, especially as it relates to hospital-based case-control studies.

SP6-57 INFLUENCE OF MATERNAL PERCEPTION ABOUT THE QUALITY OF ANTENATAL COUNSELLING ON THE CHOICE OF **DELIVERY ATTENDANT AT WEST BANDUNG DISTRICT, 2010**

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 $\textbf{Introduction} \ \ \text{This} \ \ \text{study} \ \ \text{investigated} \ \ \text{the} \ \ \text{influence} \ \ \text{of} \ \ \text{maternal}$ perceptions about the quality of antenatal counselling on the choice of birth attendant.

Methods A case control study was conducted between June and August 2010 in West Bandung district, Indonesia. Cases are mothers who had antenatal visits to midwife but choose paraji—a traditional birth attendant—at delivery between February and July 2010 and lived in the study area. Controls are mothers who had antenatal visits to midwife and choose midwife at delivery between February and July 2010 and lived in the study area.

Results Samples were consisted of 122 cases and 156 controls. Multivariate analyses showed that mothers who had poor perception of antenatal counselling were 1.88 times more likely to choose Paraji as birth attendant (95% CI 1.10 to 3.23). This was after controlling for other variables including maternal age, maternal education, number of deliveries, number of antenatal, decision maker and health insurance. Mothers who visited midwives who often used foreign or medical terminology during counselling were 1.7 times (95% CI 1.01 to 3) more likely to use Paraji as birth attendant. Not using visual aids also led to a preference for Paraji birth attendants (OR 2.4, 95% CI 1.31 to 4.51).

Conclusions The study suggested that poor perception about antenatal counselling steered mothers to using traditional birth attendant rather than midwives and other types of birthing care. Recommendations included providing midwives' skills in interpersonal communication and counselling, and to provide multiple choices of visual aids to support the counselling process.

SP6-58

DETERMINANTS OF VILLAGE HEALTH VOLUNTEER'S BEHAVIOUR ON RECORDING AND REPORTING DIARRHOEA CASES IN TEMANGGUNG DISTRICT, 2010

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Introduction Diarrhoea is the second biggest disease in top ten diseases in primary healthcare in Temanggung. Monitoring diarrhoea is one of Village Health Volunteer's Integrated Service Pos duty. This research aimed to achieve determinants (age, education, occupation, duration of occupation, marriage's status, knowledge, attitude, facilities, training, outbreak, information) of Village Health Volunteer's behaviour for recording and reporting diarrhoea's cases.

Methods Design of this research is cross sectional. Population is Village Health Volunteer in Temanggung District. Sample size is 208 Village Health Volunteers. The data were collected by interviewing respondents with using questionnaire.

Results Most of Village Health Volunteers have bad behaviour in recording & reporting diarrhoea's cases (57.69%). The study results show that factors associated with village health volunteers are education background (OR 2.189, 95% CI 1.177 to 4.073), occupation (OR 2.474, 95% CI 1.356 to 4.514), training (OR 0.119, 95% CI 0.024 to 0.585), and knowledge (OR 1.895, 95% CI 1.043 to 3.442). Conclusions Determinants of village health behaviour in recording and reporting diarrhoea cases are education, occupation, knowledge, and training. District Health office is recommended to hold a training with respect to education background. Education and occupation should be considered in village health volunteer's recruitment.

SP6-59 | FACTORS ASSOCIATED WITH DIARRHOEAL ILLNESS IN LEBAKWANGI HEALTH CENTER WORKING AREA, CIGUDEG SUB DISTRICT, BOGOR DISTRICT, INDONESIA IN 2009

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Introduction In Bogor District, Indonesia diarrhoea is still a very serious public health problem frequently occurring in outbreaks. In 2009 there were eight outbreaks of diarrhoea, one in the working area of Lebakwangi Public Health Center, Cigudeg Sub District, affecting 258 patients with a case-fatality rate of 0.78%. The aim of this study was to examine the factors associated with diarrhoea in the working area of Lebakwangi Public Health Center.

Methods A case-control study was carried out. This study examined 130 cases who were patients with diarrhoea in Lebabkwangi Public Health Center territory in August 2009 and 130 controls who were persons without diarrhoea from the same population. Data were collected by direct interviews using a structured questionnaire which included questions on sociodemographic, behavioural and environmental variables. Data were analysed using Stata.

Results In multi-variate analyses three factors were associated with experiencing diarrhoea: washing eating equipment without soap (OR 3.41 (95% CI 2.00 to 5.80)), family latrine availability (OR 2.66 (1.43 to 4.95)) and lack of availability of clean water sources (OR 1.83 (1.03 to 3.26)).

Conclusions Diarrhoeal illness was associated with washing eating equipment without soap, availability of family latrine and lack of availability of clean water source, with the strongest association between diarrhoeal illness and washing eating equipment with soap.

SP6-60

HAND WASHING PRACTICE AMONG HEALTHCARE PROVIDERS IN A TERTIARY HOSPITAL IN SOUTH EAST **NIGERIA**

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Introduction Hand washing been demonstrated to significantly reduce transmission of hospital-acquired infection. This study was carried to ascertain hand washing practice among care providers in a tertiary facility in Nigeria.

Methods The study was carried out in Federal Medical Center, in South East Nigeria. Questionnaire and checklist was used to assess hand washing practice among 240 care providers and hand washing facilities in clinics and wards.

Result The health workers surveyed included nurses (54.0%), interns (19.0%), resident doctors (12.7%) and medical officers (9.5%). Majority of them (96.8%) knew the importance of handwashing in the prevention of hospital-acquired infections. More than 50% had good knowledge of hand hygiene. About 54% of them will always wash their hands between direct contact with patients, and 68% after an invasive procedure, 92% when hands are visibly soiled, 67% after removal of gloves and 77% after personal body functions. Most common barriers to hand hygiene practice identified included, unavailability of water (61.9%) and alcohol-based agent (69.8%). About 14% of them did not wash their hands when an opportunity to do so presented. Among those that washed their hands the mean duration of hand washing was 39.6±24.4 s. Facility assessment showed that all the wards and clinics had designated place for hand washing. Only one clinic had alcohol cleaning agent and running water, 50% soap, 83.3% liquid detergent, 75% re-usable towel and 91.7% water storage container.

Conclusion The study supports earlier findings that hand hygiene practice in developing countries is relatively low and lack of supplies are barriers to its practice.

SP6-61

RISK ASSESSMENT OF OCCUPATIONAL ACCIDENTS AND PSYCHOLOGICAL STATUS AMONG EMPLOYEES IN THE MILITARY INDUSTRY IN NORTHWEST **RUSSIA**

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Introduction Occupational health and psychological comfort at work is important part of occupational safety promotion and reflects quality of life of employees. The aim of the study is to perform qualitative risk assessment of accidents and to study psychological status of employees in military industry in Northwest Russia.

Methods A cross-sectional questionnaire-based study was conducted in one of the military enterprises in the city of Arkhangelsk in 2010 in a random sample of employees (n=331) who reported on lifestyle, work experience and psychological comfort at work. Occupational hazards were analysed by criteria for risk assessment of accidents at working place (Tampere, 1994). Proportions were analysed by χ^2

Results Most of the responders were males (70.1%, n=232) aged 29.6 years on average. There were no differences by gender in psychological comfort at working place (p=0.76). Only 16.9% of the responders estimated psychological comfort at the high level. Altogether, 71.0% responders considered their working place as dangerous (n=235). Among males this proportion was higher than among females (81.9% vs 45.5%, p<0.001). Substantial and intolerable risks of accidents were found in 14.2% and 11.8% of the responders, respectively. Substantial risk was estimated in 18.1% of males and 5.1% of females (p<0.001). Corresponding proportions for intolerable risk were 13.8% vs 7.1% (p<0.001).

Conclusions Employees in Russian military industry have high risks of occupational accidents in combination with absence of psychological comfort at working place.

SP6-62 | "PRECISE-A MODEL OF COMMUNITY PARTICIPATION IN CHILD INJURY PREVENTION IN BANGLADESH. IMPLICATION FOR OTHER LOW INCOME COUNTRY"

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Introduction Community participation is an important component of a community based health intervention especially in designing, implementing and sustainability issue. A model of community participation was developed and practiced in child injury prevention project PRECISE (Prevention of Child Injury through Social Intervention) in Bangladesh.

Objective To describe the process of development and role of community groups in injury prevention project in Bangladesh.

Methods Behavioral change issues act as a major factor in injury prevention initiatives so community participation was identified as one of the guiding principle in PRECISE. Village was identified as unit for developing a community group in PRECISE. Prior to develop group 100 people were invited in a meeting; magnitude and consequences of injury and prevention issues were discussed. Discussion also took place how the community people can contribute in injury prevention. After that a 7-10 members Village Injury Prevention committee (VIPC) was formed by the community people. All of the members voluntarily expressed their interest to work for community.

Results 389 VIPC formed and each of the committee has 30% is female representative. Committee members meet in every month to reviewing present functional status and previous month implementation status of injury prevention initiatives in their village. In the meeting they identify their individual and group responsibilities and set plan of action accordingly. PRECISE has a regular program for the capacity development of the members.

Conclusion PRECISE was found as an effective child injury prevention program in Bangladesh and community participation have a significant contribution in this program.

SP6-63

ANALYSIS OF NEWBORN MORTALITY DUE TO CONGENITAL ANOMALIES ASSOCIATED WITH PERINATAL PERIOD RISK **FACTORS**

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Background Congenital anomalies play a significant role in perinatal mortality. Congenital anomalies are a cause of death in a third of all babies that die in the first year of life in Latvia.

Methods The Register of Newborns was used to identify all babies born 2000-2007 and who were diagnosed with a congenital anomaly (Q00-Q99). HRs with 95% CI were estimated using Cox regression model adjusted for mother's age, newborns' gender, different complications during deliveries and pregnancies, gestational time, newborns' birth weight and antenatal care factors.

Results Congenital malformations of the circulatory system were diagnosed in 41.9% (95% CI 32.7% to 51.7%) of all babies that died in the first year of life; 13.2% (95% CI 7.8% to 21.2%) had musculoskeletal malformations. Multiple anomalies and serious anomalies, such as diaphragmatic hernia and malformations of the digestive system were found in 7.9% (95% CI 4.1% to 14.9%). The risk of death in newborns with congenital malformations of the