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## OP 10

### **Disaster preparedness among medical institutions in the Rathnapura district**

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**Introduction:** A descriptive cross sectional study was conducted among all government allopathic health care institutions in the Rathnapura district in 2005 to assess their disaster preparedness. An interviewer administered questionnaire and a checklist was used.

**Methodology:** The referral care institutions (General and Base Hospitals), primary care institutions (District, Peripheral and Rural Hospitals) and preventive care institutions (Health units) were assessed separately. Availability of a disaster preparedness plan, facilities for communication, transport, warning, rapid mobilization, rapid response, emergency evacuation and delegation of responsibility, conducting of rehearsals, training programs and the accessibility of the medical institution was assessed.

**Results:** A preparedness plan was available in 16.6% (5/30) primary care institutions, 75% (3/4) referral care institutions and 80% (21/15) preventive care institutions. A warning system, emergency communication and transport facilities were available in 10% (3/30), 23% (7/30), 13%(4/30) primary care institutions, 100% (4/4), 100% (4/4), 50% (2/4) referral care institutions and 100% (15/15), 60% (9/15) and 33.3% (5/15) in preventive care institutions respectively. No institutions had considered emergency evacuation as a need or conducted any rehearsals.

**Conclusions:** Disaster preparedness was poor among the primary care institutions while it was better among the referral and preventive institutions.

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## OP 11

### **Writing a response paper: Tool to enhance Postgraduate learning**

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**Introduction:** Active learning is expected to be more effective than passive learning at any setting. At the postgraduate level, the student should be directed to achieve higher levels of learning by using appropriate teaching methods. Introducing the method of "writing response papers" for recommended reading, provides a new opportunity for the above.

**Objective:** To assess the applicability and usefulness of "writing response papers" in postgraduate settings.

**Methodology:** Recommended reading material was provided for the students at the end of the first session to write a response paper on subjects of "qualitative methods and health policy" in the MD Community Medicine teaching programme. The students were asked to email it to the tutor two days before the second session. The tutor selected points required to generate the discussion during this session.

**Results:** The proportion of students who prepared response papers was 40-60% [n=10/24-14/24]. The length of the response papers extended from half to one and half A4 pages. Responses given ranged from descriptive to analytical accounts of the reading material. The mainstay of the discussion was on different opinions expressed by the students that made them to appreciate alternative explanations and solutions to a particular issue. A better understanding of the students' analytical skills and the diversity was obtained because the facilitator had the opportunity to read all response papers.

Students suggested circulating each response paper among them before the second session, which would help enrich the discussion further.

**Conclusion:** Introduction of response paper writing to postgraduate learning was a new experience to students. It was possible to generate a rich discussion in the class that widens the understanding of the subject. Linking it to the assessment process will motivate students to use it an effective manner. Recommend adoption of this method on a pilot basis in other teaching activities as well.

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## OP 12

### **Provider- user perspectives of family planning related IEC material in current use**

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**Introduction:** Public Health midwives (PHMM-providers) use Family planning (FP) related IEC material to motivate method uptake among married women in the reproductive age group (MWRA-users). This qualitative study assessed the provider-user perspectives of a set of flashcards on FP and contraception, a leaflet on emergency contraception (EC) and samples in current use.

**Methodology:** Providers and users (current users, currently pregnant women) from Anuradhapura, Moneragala, Puttlam and Nuwara Eliya participated in discussions conducted by trained medical officers of the HEB. Response was facilitated by scheduling each group separately, explaining the objective of the study, using the mother tongue, using discussions guides, circulating the FP/IEC material, explaining that the study was not an assessment of PHMM performance and assuring anonymity. Respondents commented on the size, design, technical content, illustrations, language and font of the IEC material. Providers commented on availability of FP /IEC material.

**Results:** Among 163 respondents, 60.7% (n=99) were MWRA and 39.3% (n=64) were providers. Respondents considered it culturally appropriate to discuss FP and contraception, identified PHMM as the source of information, endorsed flashcards as useful, but recommended simpler illustrations of the menstrual cycle, male and female reproductive systems, temperature chart, IUD, less technical text and more information on side effects. Display of FP samples during counseling was considered useful.

Providers concurred on the need to stress that EC was not a substitute for routine contraception, but some perceived availability of information on EC as a risk factor for promiscuity among unwedded youth. PHMM in Puttlam identified the need to counter beliefs of select religious sects, exploit the electronic media and be conversant in Tamil, PHMM in Nuwara Eliya advocated more pictorial material. Availability of FP/IEC material in particular the EC leaflet showed district variation.

**Conclusions:** The results showed the need to address issues of FP/IEC material content, specific district requirements, provider competencies and streamline availability.

**Behavior Development and Behavior Change Communication intervention for Internal Migrant Workers in Industrial Promotion Zones of Koggala and Biyagama through Peer Communicators**

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**Introduction:** An estimated 96,000 male and female workers are employed in the three main industrial promotion zones (IPZ) of Koggala, Biyagama and Katunayeka. Majority of them are aged from 19 to 35 years and 85% comprise females. Inadequate knowledge, unfavorable attitudes and risk behaviors influenced by individual, biological, social and environmental factors have increased their vulnerability to sexually transmitted infections (STI) and HIV/AIDS. Interventions through peer communicators have been identified as an effective technique with successful results among school adolescents, rural and urban youth.

**Objective:** To determine the effectiveness of a behavior development (BDC) and behavior change (BCC) communication intervention using peer communicators to improve knowledge attitudes, practices and behaviours related to STI and HIV/AIDS among youth workers in Koggala and Biyagama IPZ.

**Methodology:** Thirty six and 45 peer communicators were selected from among 750 and 1250 youth workers in the Koggala and Biyagama IPZ respectively. A comprehensive orientation training program with participatory approach was conducted as a component of an integrated service package. The post evaluation was conducted six months after implementing the intervention.

**Results:** The qualitative pre evaluation of the workers in the two selected areas had shown that their knowledge was poor with unfavorable attitudes combined with risky behaviors. The post evaluation showed that peer communicators performed a useful role in diffusing the message on the risk of HIV/AIDS. They were popular and had won the confidence of fellow workers. The message of STD and HIV/AIDS has reached 80% of the target population in both areas. A substantial change in attitudes was observed towards sexuality, use of protective measures and perceptions regarding AIDS patients. Skill development has improved moderately. However, the follow up time was inadequate to determine a behavior change.

**Conclusion:** The successful implementation of this intervention has proven the feasibility of conducting BCC/BDC programs through peer communicators for sensitive sexual issues. It is recommended to be tested in similar situations.

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## OP 14

### Adolescents' expectations on reproductive health information published by news papers

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**Objective:** To explore the impressions and expectations of adolescent school children about reproductive health (RH) related articles published in Sinhalese newspapers.

**Methodology:** Focus group discussions (FGD) were conducted among advanced level students (n=134) in the schools (n=5) of Gampaha district. Schools were selected by stratified purposive sampling based on stream (bio and non-bio), gender and location (urban/rural). The participants were between seventeen and eighteen years of age. FGD were conducted by medical officers with the guidance of a pre-designed core questionnaire. Content analysis was performed.

**Results:** The majority of the students, irrespective of location (urban/rural) and study stream, claimed that they have more opportunities to read national papers compared to tabloid papers. However, they were not satisfied about the adequacy of various aspects covered and presentation of RH related information by newspapers. Most of adolescents preferred information in ordinary language (than scientific jargon) in the format of question and answer, without seductive photographs. Articles which could help to manage their emotions and to improve their life skills were preferred.

Adolescent girls were interested to read about puberty, menstruation, contraception, commercial sex, virginity and STD and boys about homosexuality, heterosexuality, masturbation, STD, contraception and abortion. Masturbation related information was invariably expected from most of the members of male focus groups. Non bio students of both rural and urban locations expected more details related to conception.

It was also revealed that lack of proper information related to RH had led school children to gather information through pornography.

**Conclusions:** Print media should make an attempt to cover the subject areas that are of demand among the adolescents, as the existing coverage was not satisfactory. The RH articles should be presented in an adolescent friendly manner. This may prevent the adolescent from depending on low quality sources to get information on adolescent reproductive health.

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## OP 15

### **Risk factors for oligozoospermia among clients attending Sub Fertility Clinic, Faculty of Medicine, Karapitiya, Galle.**

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**Introduction:** Declining sperm counts have contributed to the increasing number of infertile couples in the world. However, information on factors responsible for male infertility is scarce.

**Objective:** To identify risk factors for reduced sperm counts (oligozoospermia) among sub fertile men.

**Methodology:** An unmatched case control study was carried out among 113 cases and 113 controls selected from clients attending the Sub Fertility Clinic, Faculty of Medicine, Galle. Cases were those with oligozoospermia while controls had normal seminal fluid. Exposure information was obtained using an interviewer administered questionnaire and clinic records.

Bivariate analysis was carried out initially to identify risk factors followed by multivariate logistic regression analysis to control for confounding factors.

**Results:** Cases and controls were similar in their socio demographic characteristics: age, ethnicity, residential district, social class education and income. In the bivariate analysis, structural defects in the genitourinary system (OR =3.44, 95% CI=1.76- 6.71), history of systemic diseases (OR=5.18, 95% CI=1.44-18.57) and exposure to pesticides(OR= 3.8, 95% CI=1.28-8.86 ) and solvents (and OR=6.49, 95% CI=1.84-22.83) were significantly associated with oligozoospermia. In the multivariate analysis, history of systemic diseases (OR=6.53, 95% CI=1.54-27.6), previous infections with, mumps (OR=5.74, 95% CI=1.38-23.83), measles (OR=4.31, 95% CI=2.15-8.63) and urinary tract infections (OR=5.78, 95% CI=2.46-13.55) and exposure to solvents (OR=5.74, 95% CI=1.38-23.83) were significantly associated with oligozoospermia

**Conclusions:** Based on this study, prevention of infections and protection of workers from exposure to solvents are recommended as interventional opportunities in the prevention of male factor infertility.

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## OP 16

### **Determinants of antenatal care utilization in a district of Northern Sri Lanka**

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**Introduction:** Maternal and child health services have been severely disturbed as a consequence of long-term armed conflict in Northern Sri Lanka

**Objectives:** To describe utilization of ante-natal care services (ANC) and its determinants in a conflict affected area in Northern Sri Lanka

**Methodology:** A cross-sectional descriptive study was conducted among pregnant mothers who had completed 36 weeks of gestation, and were admitted or referred to two leading hospitals in Vavuniya district. Data were collected from 392 mothers by trained interviewers through a questionnaire. Information was sought on individual household and community characteristics and utilization of ANC services for the current pregnancy.

**Results:** Fifty-eight percent of the respondents (n=229) reported that their families were affected directly by the conflict. Sixty-eight percent (n=268) were registered by Public Health Midwife (PHM) for ANC: 31.4% (n=123) were registered before 12 weeks of gestation; 38.5% (n=151) were visited at home by PHM; 37.8% (n=148) had booking clinic visit before 12 weeks; 90.1% (n=353) made at least four antenatal clinic visits. Average antenatal visits to specialist clinics (5.34; 95% CI=5.03-5.65) was significantly higher than field clinics (2.97; 95% CI=2.69-3.25). On average a pregnant mother was seen by PHM at home 1.47 times. Proportion registered for ANC by PHM was poor (61.6%; n=141) in women whose families were affected directly by conflict (n=229). Registration before 12 weeks was lower among mothers living in active conflict areas, i.e., Vavuniya North (25.0%; 2/8) and educated below primary level (19.6%; 9/46). Mothers living in rural areas (41.3%; 93/225) were more likely to be registered for ANC before 12 weeks than the urban (17.9%; 30/167).

**Conclusions:** Early registration for ANC is low in Vavuniya district. ANC utilization was poor among families affected directly by the conflict and living in active conflict areas.

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## OP 17

### **Prevalence of self reported postpartum morbidity and health seeking behaviour of mothers in Vavuniya district**

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**Introduction:** As there had been a great reduction in maternal mortality in Sri Lanka, it is timely to focus on minimizing maternal morbidity.

**Objective:** To determine the prevalence of self reported postpartum morbidity and health seeking behaviour of mothers in the Vavuniya District.

**Methodology:** A community based cross sectional study was conducted. Sample included all mothers (hospital and home deliveries) who had completed postpartum period between 1<sup>st</sup> August and 30<sup>th</sup> September 2007. They were identified based on the "expected date of delivery" registers. Data was collected by trained public health midwives at the respondent's houses using an interviewer administered questionnaire.

**Results:** The mean age of the 540 postpartum mothers interviewed was 27.7 (range: 16 - 44) years. Forty three (8%) were teenagers and 50 (9%) were >35 years. Majority 78% (n=423) were Sri Lankan Tamils, 13% (n=68) Sinhalese and remaining 9% (n=49) Moors. Thirty nine percent (n=209) of them were primi parous, 81% (n=435) had a normal delivery and 79% (n=344) of them had an episiotomy.

Prevalence of post partum morbidities was 98% (95%CI=96.8-99.2, n=529). Commonly reported morbidities were back pain (57%, 95%CI=52.8-61.2, n=308) fatigue (51.9%, 95%CI=47.6-56.2, n=280) and perineal pain (46.7%, 95% CI=42.5-50.9; n=252). Other important morbidities were, gaping or pus from episiotomy (19.8%, 95% CI=15.6-24.0, 68/344), excessive bleeding (36.3%, 95% CI=32.3-40.3, n=196), breast problems (21.1%, 95%CI=17.7-24.5, n=114), offensive vaginal discharge (9.4%, 95% CI=6.9-11.7,; n=51) and urinary incontinence (6.3%, 95% CI=4.3-8.3, n=34), dysuria (12%, 95% CI=9.3-14.7, n=65), fever (19.6%, 95% CI=16.3-22.9, n=106), constipation (23.7, 95% CI=20.1-27.3, n=128), anal-incontinence (16.5%, 95% CI=13.4-19.6, n=89), dizziness (28.5%, 95% CI=24.7-32.3, n=154).

The median number of reported morbidities was 5 (range: 0-14). Eighty seven percent (n=469) of mothers had 3 or more morbidities but only 46% (n=241) had consulted a health worker regarding their problem

**Conclusion:** Despite a very high prevalence (98%) of post partum morbidities only 46% of the mothers had consulted a health worker. It appears that the majority of mothers are suffering in silence.