



# ***The Role of Field Epidemiologist in Public Health Emergency Preparedness and Response***

**Solo Paragon Hotel, Solo, Indonesia | 07 - 10 September 2016**

# **FETP**

**FIELD EPIDEMIOLOGY TRAINING PROGRAM**

# **INDONESIA**



## WELCOME MESSAGE

On behalf of the Organizing Committee, I am delighted to welcome all the participants and guests to Solo, Central Java, for the 6th National Scientific Conference on Epidemiology that will take place from September 8 to 10, 2016. This is Indonesia's largest annual event devoted to the science and practice of field epidemiology, and it will give participants a platform to exchange ideas, showcase field works, reacquaint with colleagues, meet new friends, and broaden their knowledge. The conference is held at the Solo Paragon Hotel, which is strategically located in the heart of Solo City.

The theme of the NSCE 2016 is "Role of Field Epidemiologist on Public Health Emergency Preparedness and Response", that will refresh our knowledge, skills as well as experience as a field epidemiologist.

We are pleased to have WHO, MoH, B2P2VRV Salatiga, FDA Indonesia, Health Promotion and INDOHUN as the plenary speakers. In addition to breakout presentations, that presents FETP students from UI, UGM, Unair and Udayana as well as FETP Alumni.

All of the members of the local Organizing Committee from Sub Directorate of Surveillance and FETP Indonesia Secretariat wish you a wonderful conference experience and a memorable stay in Solo. Welcome to Solo! Sugeng Rawuh ning Solo!

Director General of Disease Control

**dr. H. Mohamad Subuh, MPPM**

## **SURAKARTA (SOLO) CITY**

Surakarta or more famous as Solo is lying across in fertile plain terrain along the longest river in Java, Bengawan or River Solo. Flanked by mountain volcanoes Merapi and Merbabu in the north, and mount Lawu in the southeast border, is famous as a stronghold and center of Javanese culture and tradition. Surakarta, is the cradle of Javanese culture, with two royal houses in one single city: the Kraton of Solo and the Mangkunegaran, a principality. Descendants of these two royal houses are still considered leaders of Javanese culture and traditions. Majestic ceremonies and royal festivals are still held with great affectation nowadays. Surakarta or Solo (550,000 inhabitants) draws its name from the longest river of Java, which passes in this city. It was the capital of the kingdom of Mataram from 1745 to 1755. There are many Becak (rickshaws decorated with naive scenes) croos the city.

Solo offers an incredible list of eateries also popular far beyond the city. Solo today remains a distinctly Central Javanese with an elegance all its own. It is one of the centers of batik and other Javanese fabrics, and souvenir hunters may find exquisite 'objects d'art' and ornate trinkets in the local markets. Those interested in old, Javanese culture and art should not miss Solo. Solo is called the city that never sleeps. From the evening throughout the whole night one can always find something to eat or buy, as vendors of all kinds as well as small food-stalls remain active and open 24 hours. Home of two royal houses with centuries of power and influence over the city. There are nice inns and hotels in Selo for accommodation. This place was a famous holiday resort of Surakarta Royal Families.

Solo is Surakarta's commercial as well as its administrative center, and produce from the surrounding desa fills the markets every day. Solo produces cigarettes, herbal medicines and various other light industry products, but batik is far and away the most important manufacturing activity in the city. Batik is a traditional textile working process involving the use of wax to cover the cloth in patterns and thus control the areas affected by dying. In the traditional process, batik tulis ("written batik") hot wax is applied with incredible patience and skill with an instrument that looks like a pipe but is used like a pen. The women and girls sit circled around an often-smoky little burner that heats the wax.

Many of the larger houses participate in the batik industry, with an area set aside for a covey of from 10 to 30 women and girls, who usually come from the village (desa). Really skilled workers are generally old, and the present level of batik production is not likely to continue in economically developing Java as alternative, less demanding activities absorb more of this cheap labor.

## AGENDA

### Day 1: 8 September 2016

| TIME               | PLACE     | ACTIVITY  |  |                     |
|--------------------|-----------|---|--|---------------------|
| 08.00-09.00        | Ballroom  | Registration  |  |                     |
| 09.00-09.10        |           | Opening Remarks:<br>Head of PHO Central Java  |  |                     |
| 09.10-09.20        |           | Committee Report :<br>Head of Sub Directorate of Surveillance   |  |                     |
| 09.20-09.50        |           | <b>Opening and Key Note Speech:</b><br>Topic: The Role of Field Epidemiologist in Public Health<br>Emergency, Preparedness and Response |  |                     |
| 09.50-10.00        |           | <b>Photo Group Session</b>  |  |                     |
| <b>10.00-10.15</b> |           | <b>COFFEE BREAK</b>   |  |                     |
| 10.15-12.00        | Ballroom  | <b>Plenary Session 1</b><br><b>Moderator: UI</b>  |  |                     |
|                    |           | 10.15-10.45   | IHR 2005 and Regional Issues<br><i>WHO</i>                 |                     |
|                    |           | 10.45-11.15   | Implementation of IHR in Indonesia<br><i>MoH Indonesia</i> |                     |
|                    |           | 11.15-11.45   | GHSA Action Package<br><i>FETP Secretariat</i>             |                     |
|                    |           | 11.45-12.00   | Discussion   |                     |
| <b>12.00-13.00</b> |           | <b>LUNCH</b><br><b>POSTER PRESENTATION</b>  |  |                     |
|                    |           | <b>Oral Presentations</b>   |  |                     |
| 13.00-14.00        | Emerald 2 | Oral Presentation 1   | Emerald 3  | Oral Presentation 2 |
| 14.00-15.00        | Emerald 2 | Oral Presentation 3   | Emerald 3  | Oral Presentation 4 |
| 15.00-16.00        | Emerald 2 | Oral Presentation 5   | Emerald 3  | Oral Presentation 6 |
| <b>16.00-16.15</b> |           | <b>COFFEE BREAK</b>   |  |                     |
| 16.15-17.15        | Emerald 2 | Oral Presentation 7   | Emerald 3  | Oral Presentation 8 |

**Day 2: 9 September 2016**

| TIME               | PLACE    | ACTIVITY   |  |
|--------------------|----------|--|--|
| 08.00 -10.30       | Ballroom | <b>Plenary Session 2</b><br><b>Moderator: UGM</b>      |  |
|                    |          | 08.00-08.30  | Public Health Preparedness and Response<br><i>WHO</i>  |
|                    |          | 08.30-09.00  | Role of Laboratory in Public Health Preparedness and Response<br><i>B2P2VRV Salatiga</i>                         |
|                    |          | 09.00-09.30  | Risk Communication during Public Health Emergency<br><i>MoH Health Promotion</i>                                 |
|                    |          | 09.30-10.00  | Discussion   |
| <b>10.00-10.15</b> |          | <b>COFFEE BREAK</b>                                    |  |
| <b>10.15-11.30</b> | Ballroom | <b>Oral Presentation 9</b>                             |  |
| <b>11.30-13.00</b> |          | <b>LUNCH / FRIDAY PRAYER<br/>POSTER PRESENTATION</b>   |  |
| 13.00-14.00        | Ballroom | <b>Oral Presentation 10</b>                            |  |
| 14.00-15.30        | Ballroom | <b>Special Presentation</b><br><b>Moderator: Unair</b> |  |
|                    |          | 14.00-14.30  | Surveillance Performance and EWARS<br><i>Subdit Surveillance</i>   |
|                    |          | 14.30-15.00  | Role of FDA (Badan POM) in Supporting Food Borne Disease Outbreak Investigation and Response<br><i>BADAN POM</i> |
|                    |          | 15.00-15.30  | Discussion   |
| <b>15.30-15.45</b> |          | <b>COFFEE BREAK</b>                                    |  |
| 15.45-17.00        | Ballroom | <b>Oral Presentation 11</b>                            |  |

**Day 3: 10 September 2016**

| TIME         | PLACE    | ACTIVITY                             |   |
|--------------|----------|--------------------------------------|---|
| 08.00 -10.00 | Ballroom | Plenary Session 3<br>Moderator: Unud |   |
|              |          | 08.00-08.30                          | Role of FETP Indonesia of Detecting and Response in PH Emergency<br><i>Director of Surveillance and Health Quarantine</i> |
|              |          | 08.30-09.00                          | One Health Approach to Combat Emerging Zoonotic Disease<br><i>INDOHUN</i>   |
|              |          | 09.00-09.30                          | Discussion  |
| 09.30-10.00  |          | COFFEE BREAK                         |   |
| 10.00-10.30  | Ballroom | Committee Report and Award           |   |
| 10.30-11.00  | Ballroom | Closing                              |   |

# **ORAL PRESENTATIONS**



***Oral Presentation 1 and 2***  
**THURSDAY, 8 SEPTEMBER 2016/13.00-14.00**

| <b>Session 1: Emerald 2<br/>Evaluation of Surveillance System</b> | <b>Session 2: Emerald 3<br/>Food and Water Borne Disease 1</b> |
|---|--|
| Dian Muspitaloka Hikmayati  | Asriati  |
| Namira Wadjir Sangadji  | Debsy Vonneke Pattilima  |
| Riky Hamdani  | Dimas Panduasa   |
| Putri Tiara Rosa  | Dwi Putri Sulistiya  |

**SESSION 1 – EMERALD 2**

**TOPIC: EVALUATION OF SURVEILLANCE SYSTEM**

**1. Evaluation of Leprosy Surveillance System at Mojokerto District Health Office – East Java, 2016**

**Authors: Dian M. Hikmayati<sup>1</sup>, A. Hargono<sup>2</sup>, P. Atmodjo<sup>3</sup>**

**<sup>1</sup>Field Epidemiology Training Program, Faculty of Public Health, Universitas Airlangga <sup>2</sup>Epidemiology Department, Faculty of Public Health, Universitas Airlangga <sup>3</sup>Sumber Glagah Leprosy Hospital**

**Background:** Mojokerto is an area of high leprosy burden in East Java. The new case detection rate has decreased from 7,4/100.000 population in 2014 to 3,58/100.000 population with 97% of MB proportion. During the achievement of East Java Leprosy Elimination in 2017, it is required a good surveillance system. The purpose of this study was to evaluate the leprosy surveillance system in Mojokerto District Health Office.

**Methods:** This study used evaluation study design. The subject of this study were system components (input, process, output) and attributes. Data were collected in 21 Health Centers (PHC) and Mojokerto District Health Office through interviewing the leprosy officer, observing the facilities availability, and document analysis against Leprosy reports.

**Results:** The problem was found system components were 76,2% of PHC officers didn't have the Leprosy Form completely, 61,9% of PHC officers holding >2 programs, 76,1% of PHC officers didn't send the cohort regularly, 90,4% of PHC officers didn't analyze the data, and the quarterly report didn't cover all of PHC. Problems on the attribute were found in acceptability caused by the household contact detection had never reached 20 people yet, sensitivity and timeliness caused by the low of cohort delivery accuracy by PHC, data quality caused by 95,2% of PHC officers didn't fill the cohort completely, and stability due to duration of RR Leprosy electronic error could more than 24 hours.

**Conclusions:** The leprosy surveillance system has unmatching components with standard and a low-level of attributes. In effort to improve the surveillance system, the Health Office needs to conduct technical guidance and monitoring regularly to increase the commitment, accuracy and completeness in report and develop an electronic information system for PHC.

**Keywords:** Surveillance System, Evaluation, Leprosy, Attributes

**2. Evaluation of Implementation of Dengue Disease Surveillance System in Smallest City of Central Java 2015.**

**Authors: Namira Sangadji (1), A.Tresno (1), D.Woro (2)**

**(1) Field Epidemiology Training Programs, Gadjah Mada University, Indonesia (2) Salatiga Health Office**

**Background :** The rate of dengue in Salatiga tends to increase and become one of main health problem each year. The incident rate of dengue in 2014 has achieved 4,6/100.000 in population and has increased to be 13,28/100.000 by 2015. The several factors that should be considered are report system of dengue, belated overcoming of dengue and inconsistency with Standard Operational Procedure (SOP). This study aims to evaluate the implementation of surveillance system of dengue in Salatiga 2015.

**Methods :** This study is a descriptive study which is observed on April-May 2016. The problems are identified by questionnaires and checklist sheets. The questionnaires and checklist sheets are given to all administrators of dengue surveillance system in Salatiga. The evaluation of surveillance systems are assessed by WHO criterias which are support, function, and quality surveillance.

**Results :** Supports surveillance: education of administrators is D3 (100%), never trained and no guidebook (100%), no conduct monitoring and evaluation (100%), have transportation, computer and funds (100%), work more than 5 years (66.6%), had more than 3 positions (66.6%). Surveillance functions: cases are found in hospitals (100%), not available form W2, DP-DBD, K-DBD, and KD Puskesmas (100%), no conduct analysis and interpretation (100%), already dissemination (100%). Quality surveillance: the number of cases and the number of reports incomplete (100%), not timely in submitting report (100%).

**Conclusion :** There are several issues which are not solved in WHO criterias such as no available guidebook and reporting forms, administrators have not been trained, no conduct analysis and interpretation, completeness and accuracy of delivery case reports are not appropriate. Our recommendation is to optimize the reporting system and control of dengue fever in accordance with the SOP.

**Key Words :** Dengue, Evaluation Surveillance, Salatiga

**3. Evaluation Of Tuberculosis Surveillance System At Health Office Of Mojokerto - East Java, 2016**

**Authors: Riky Hamdani<sup>1</sup>, H. Arief<sup>2</sup>, A. Purwo<sup>3</sup>**

**<sup>1,2</sup>Master of Field Epidemiology Training Program, Universitas Airlangga <sup>3</sup> Sumber Glagah Leprosy Hospital**

**<sup>1</sup> e-mail: rikyhamdani\_rha@gmail.com**

**Background:** Tuberculosis (TB) is one health problems in Mojokerto. The number of TB cases in Mojokerto district was 78/100.000 in 2015 and case detection rate value hasn't reach 70% yet. Those problems would not actually happen if the surveillance is going well. The purpose of this study was to describe the problem of TB surveillance system based on the system and attributes as well as provide an alternative solution.

**Method:** This research was a descriptive study with evaluation study design. This study was conducted in 21 Public Health Centers (PHC) and Mojokerto District Health Office. Data were collected through interviews with TB officer in 21 PHC and Mojokerto District Health Office, using questionnaires, and document analysis against TB data reports.

**Results:** Weaknesses were found in the TB surveillance system based on system components were 28,57% of officers still have not got the training, all officers holding >2 program, the lack of computers and the Internet availability, the report accuracy just 30% and completeness report only 80%, the data didn't analyze by officers. While the weakness of TB surveillance systems on attributes were the lack of patient awareness in the check-up, the feedback was more than 3 months, the damage of information systems tuberculosis integrated > 1 time in a year and repair duration more than 1 week.

**Conclusion:** Problem of TB surveillance system in Mojokerto regency contained in the system and attributes. Alternative issues for strengthening the surveillance system are the Department of Health training to health center personnel, and monitoring as well as referrals to PHC that have problems in reporting.

**Keywords:** tuberculosis, surveillance, system, attribute.

#### **4. Review and Analysis of Program Evaluation Iodine Deficiency Disorders Prevention and Control in Temanggung, Indonesia**

**Authors: Putri T.Rosha<sup>1</sup>, K.Mualim<sup>2</sup>, D.Pramono<sup>1</sup>**

**1 Field Epidemiology Training Program (FETP), Gadjah Mada University 2 Temanggung District Health Office**

**Backgrounds:** Temanggung has region mountainous geographically so it has potential problem of Iodine Deficiency Disorder (IDD). Manifestations of IDD were thyroid gland, hypothyroidism, abortion, stillbirth and infant birth defect (cretin). IDD still occurred in five Public Health Centers (PHC) are Parakan, Kledung, Temanggung, Tembarak and Ngadirejo. This study aim to evaluate the implementation of IDD prevention and control program in Temanggung District.

**Methods:** This is a descriptive study. This study evaluate input, process, output and outcome compared with program target. Ten PHC were selected as samples using purposive sampling method. Twelve keys personnels are The Head of Nutrition section, nutritionist programmer and ten nutritionists in PHC were interviewed. Collected data used primary and secondary data.

**Results:** The weakness of input were double workload (20%), some officer (20%) hadn't been pursued palpation training, limited financial (20%) and inadequate facilities (20%). The process of implementation program were less supervision (30%), cross-sectoral involvement (10%) and some PHC (20%) has not made a referral cases in IDD Research and Development Center. Household coverage of iodized salt consumption has reached 90%, but five PHC had Total Goiter Rate (TGR) > 5% were Temanggung (5.35%), Kledung (10.77%), Parakan (15.48%), Ngadirejo (17.46%) and Tembarak (7.72%). There was decreasing TGR but Kandangan, Temanggung and Wonoboyo PHC had cretin cases.

**Conclusions:** The prevention and control IDD had not been implemented optimally. IDD had not reached the target (TGR <5%) and there was still cretin cases. Recommendations to solve the problem by providing palpation training, increasing financial, infrastructure availability and improving collaboration. Effort to prevention and control IDD are being done by increasing promotion in public place and commitment of stakeholders.

**Keyword:** IDD Evaluation Program, iodized salt, TGR, Temanggung

## **SESSION 2 – EMERALD 3**

### **TOPIC: FOOD AND WATER BORNE DISEASE 1**

#### **1. Foodborne Outbreak Investigation in Darul Hikmah Boarding School Sleman District.**

**Authors: Asriati<sup>1</sup>, Jonri M. Pandiangan<sup>1</sup>, Berti Murtiningsih<sup>2</sup>, Samsu Aryanto<sup>3</sup>.**

**1 Field Epidemiology Training Program (FETP), Universitas Gadjah Mada 2 Dinas Kesehatan Provinsi Daerah Istimewa Yogyakarta 3 Dinas Kesehatan Kabupaten Bantul**

**Background.** Sleman District Health Office received a report related to the increase cases with symptoms of nausea, vomiting, and diarrhea at Panti Nugroho Hospital Sleman in 3rd May 2016. This outbreak believed occurred after student from Darul Hikmah Boarding School in Sleman ate their daily meals. Epidemiology investigation held to confirm the outbreak, determine the cause and mode of transmission of the incident.

**Method.** This study uses a case-control study. The population in this study were all students of Darul Hikmah Boarding School who ate on Monday, May 2, 2016. Sample were taken in ratio 1:2 (19:38) of the population. Cases were all students who ate and had symptoms since Monday, May 2, 2016.

**Result.** There were 19 people who suffered food poisoning with highest risk among females as much as 34,62%. Symptoms of poisoning posed, namely: Diarrhea (25%), dizziness (23,7%), nausea (18,3%), abdominal pain (26,7%), vomiting (21,7%), and fever (16,7%). Outbreak type was common source epidemic with incubation period in 6 hours until 32 hours. The type of food that has the highest risk factor is Dried Soybean (Kering Tempe) and Egg Stew (Semur Telur) with Odds Ratio are 13 and 4,4 and p-value 0,0001. Bacteria suspected as the cause of poisoning was *Bacillus cereus* and *Escherichia coli* based on the differential diagnosis, because food samples late to be secured.

**Conclusion.** *Bacillus cereus* and *Escherichia coli* is suspected as cause of food poisoning which presumably come from Dried Soybean and Egg Stew on Monday May 2, 2016.

**Keyword.** Food Poisoning, Sleman

**2. Hepatitis A outbreak at Luweng lor, Purworejo District , Center Java Province, Indonesia 2014**

**Author: Debsy Vonneka Pattilima**

**Background:** On June 10th 2014, Purworejo district health Office received a report of a Karanggetas health center that there increase number of Hepatitis A Clinical 22 cases in Luweng Lor village. We investigated outbreak to confirm diagnosis to identify source and risk factors to initiate control measure and to propose recommendation.

**Methods:** A matched case control study was conducted to identify risk factors associated with the illness. we defined suspected case as any resident with fever, jaundice, nausea, vomiting, abdominal pain, reduced appetite, general malaise and diarrhea from March to June 2014. Cases had laboratory confirmation of acute hepatitis A virus infection or was clinically diagnosed with hepatitis A. Case were 83 peoples, control were 83 peoples. Participants were interview by structure questionnaire. Data analysis involved logistic regression.

**Results:** 83 cases of hepatitis A were identified. Symptoms were fever(96%), bilirubinuria (95%), sclera jaundice(95%), reduced appetite (94%), malaise (94%), nausea (89%), vomiting (89%), jaundice(89%) abdominal pain(71%), headache(71%), diarrhea(10%). Significant bivariate results included had contact with case (OR=5,863; CI=1,805-24,633; p=0,0008 ), Hand washing without soap (OR=4,48; CI=1,412-15,579; p=0,0039), not washing hands with soap after defecating (OR=3,670; CI=1,812-7,495; p=0,0001), consuming un-boiled water OR=1,954; CI=0,889-4.375; p=0,069), consuming food outside home (OR=2,158; CI=1,089-4,295; p=0,017). The significant multivariate result had contact with case (OR=9,024; CI=2,278-35,739; p=0,002), washing hands with soap after defecating (OR=8,806; CI=2,631-29,470; p=0,000), consuming food outside home (OR=4,301; CI=1,307-14,144; p=0,016).

**Conclusion:** There was an outbreak of Hepatitis A in Luweng lor village, Purworejo district between march 2014 And June 2014. the behavior is unhealthy and unhygienic like had contact with case, washing hands with soap after defecating, consuming food outside home were a risk factor for the incidence of hepatitis A in Luweng Lor village in poworejo district.

**Keywords:** hepatitis A, outbreak, Purworejo, case control study, risk faktor

**3. Determinants of mothers in the delivery complementary feeding (MP-ASI) Early in infants in the Nyapah village Walantaka District of Serang City**

**Authors: Panduasa, D.1 Munawaroh, S.2**

**1BKBPM Serang District 2Staff on Banten Provincial Health Department**

**Background:** Complementary feeding in Indonesia is still much that is not age-appropriate. Riskesdas 2010 showed 83.2% of infants have gained Early complementary feeding, whereas the provision of early complementary feeding cause indigestion in infants such as diarrhea, constipation, vomiting, allergy and failure to thrive. This study aims to know determinant of mother to giving early Complementary feeding (MP-ASI) in the Nyapah Village District of Walantaka.

**Methodology:** The study design was cross-sectional. The number of research samples are all mothers of children 7-24 months. logistic regression analysis is used to calculate adjusted Prevalence Odds Ratio (POR). Results: This study had 88 respondents. The final results found that respondents with less gain knowledge level POR 5.28 (95 CI 1.73 to 15.9) provide complementary feeding Early and respondents with family support in providing complementary feeding early to get POR 32.6 times (95% CI 3.8 to 274) provide complementary feeding early.

**Conclusions:** Knowledge and family suport is associated with delivery complementary feeding (MP-ASI) Early in infants. it is therefore necessary conducting regular outreach activities focused to the mothers and families about giving Complementary feeding (MP-ASI) timely and important about exclusive breastfeeding.

**Key Word :** Determinants, Complementary feeding Early

**4. Investigation Of Drink Poisoning Outbreak In An Elementary School, caused by Cadmium-Sleman 2015 Authors: Dwi Putri<sup>1</sup>, Risa<sup>1</sup>, Isa Dharmawidjaja<sup>2</sup>, Dibyo Pramono<sup>2</sup>, Novi K<sup>3</sup>**

**1 Field Epidemiology and Training Program (FETP), University of Gadjah Mada; Indonesia 2 Field Epidemiology and Training Program, Public Health, University of Gadjah Mada; Indonesia 3 Sleman District Health Office, D.I. Yogyakarta; Indonesia**

Background: On November 13, 2015, Sleman District Health Office received reports of alleged food poisoning in Kalasan after attending school events. 21 students were rushed to hospital with symptoms of nausea, vomiting, dizziness and abdominal pain. Investigation was done to confirm the outbreak and determine the cause and source of infection.

Methods: This was a case control study. A case was defined as a previously well individual who experienced any of the following : dizziness, abdominal pain, nausea, vomiting, headache, shortness of breath at school events take place. Controls were those who come, but did not experience any symptoms. Drinks and vomit samples were collected and sent to the laboratory.

Results: There were 69 cases and 69 controls. The incubation period for outbreaks of between 15 minutes-3 hours. Most common symptoms were headache (71.43%) and nausea (61.54%). Ages ranged from 8-11 years old. Fourth grade students at most experiencing symptoms (75.41%) with the largest age of 9 years (45.05%). Students drink > 1 dose (pouch and glass) of (48.55%). AR tea based beverages is highest (pouch) (59.4%). Found to contain cadmium in beverage packaging pouch 0.0009 ppm. Drinking tea (pouch) associated with poisoning drinks (OR = 1.219, 95% CI = 0.562 to 2.648).

Conclusions: There was an outbreak of food poisoning in Kalasan, the drink implicated was drink tea (pouch). There was the content of cadmium in drink tea (pouch). Need to increase supervision of the processing plant and the provision of food packaging and food security circulating in the community, so that no other food poisoning.

Keywords: Drink poisoning, case control, cadmium, Sleman

## ***Oral Presentations 3 and 4***

THURSDAY, 8 SEPTEMBER 2016/14.00-15.00

| <b>SESSION 3: ROOM EMERALD 2<br/>FOOD AND WATER BORNE DISEASE 2</b> | <b>SESSION 4: ROOM EMERALD 3<br/>FOOD AND WATER BORNE DISEASE 3<br/>AND NON INFECTIOUS DISEASE</b> |
|---|--|
| Firman Suryadi Rahman   | Risma Dian Anggraini   |
| Melyana   | Ruri T   |
| Ni Putu Eka Purnama Dewi  | Totok Sutianto   |
| Radian Ilmaskal   | Rimawati Aulia Insani Sadarang   |

### **SESSION 3– EMERALD 2**

#### **TOPIC: FOOD AND WATERBORNE DISEASE 2**

1. **Risk Factors of Hepatitis A Outbreak – Jember, 2016**  
**Firman S. Rahman, Atik C. Hidajah, and C. U. Wahyuni**

Hepatitis A always occurred in the last five years and befell students. It often occurred in the form of outbreak. In 2015, Hepatitis A outbreak occurred in Sukowono, Jember with 48 cases. The objective of this research was to analyze risk factors affecting Hepatitis A.

Methods: The approach used in this research was case control study. The number of case sample was 40 people, and so was the control sample. The sample was selected using simple random sampling. Analysis was performed using Chi Square. Dependent variable was Hepatitis A case, while independent variable covered students' knowledge, defecation behavior, toilet possession, water consumption, meals at canteen habit, raw food consumption, street food purchasing habit, flatware use sharing, hand washing habit, household income, household density, and meal habit during extracurricular activities.

Results: Variables affecting Hepatitis A case were toilet possession and defecation behavior (  $p=0,013$ , OR = 3,09 ; 95% CI=1,243-7,706), raw food consumption (  $p= 0,008$ ; OR 6,03 ; 95% CI = 1,882-12,482), and meal habit during extracurricular activities (  $p=0,001$  ; OR=6,751 ; 95% CI = 2,615-18,737).

Conclusions: Risk factors affecting Hepatitis A case were toilet possession, defecation behavior, raw food consumption, and meal habit during extracurricular activities. Thus, it is recommended that health office and education office cooperate to improve students' knowledge about Hepatitis A and the implementation of proper personal hygiene to prevent Hepatitis A contagion.

Keywords: Hepatitis A, outbreak, risk factors, students

2. **IDENTIFICATION OF THE CAUSES OF FOOD POISONING OUTBREAK IN SITJARJO VILLAGE, SUMBERMANJING WETAN SUB DISTRICT, AT MALANG DISTRICT, EAST JAVA PROVINCE**

Melyana<sup>1</sup>, Sigunawan<sup>2</sup>, A. C. Hidajah<sup>3</sup>

<sup>1</sup> Field Epidemiology Master Program Airlangga University <sup>2</sup> Lamongan District Health Office <sup>3</sup> Department of Epidemiology Faculty of Public Health Airlangga University 1melyana-2015@fkm.unair.ac.id, 2sigunawan20@yahoo.com, 3atik-c-h@fkm.unair.ac.id

**Background:** Food poisoning is an event where two or more people were ill with the same symptoms after consuming food. In this study, food poisoning outbreak was declared after 22 villagers went to Sitiarjo health center with the same symptoms in less than 6 hours after consuming food that comes from the village event which called "bersih desa". The objective of the study was to identify the agent causing the food poisoning outbreak that occurred on May 28, 2016.

**Methods:** Outbreak investigation was conducted by case-control studies. Total cases of poisoning symptoms are 22 people. Forty four villagers who come and eat the food at the event but had no poisoning symptoms, were drawn as a control group. Identification of the cause by counting Attack Rate on the food consumed in the case and control group. Determination of types of the causes was based on the incubation period and the risk factors that was found during investigations in the field.

**Results:** The food served is chicken rice soto, rica-rica chicken, watermelon, orange, mineral water and sweet tea. After consuming the food, some villagers began to come to the nearest health facility with symptoms of dizziness, nausea, vomiting, sweating, diarrhoea, and fever. The most suspected foods was chicken rice soto (AR = 12.244). The shortest incubation period of food poisoning was 1 hour, while the longest was 6 hours. The incubation period in accordance with the characteristics of *Staphylococcus aureus*. The investigations found that this food have been made the day before the event held and stored without heating which was the risk factor of the bacteria contamination.

**Conclusions:** Food poisoning outbreak in Sitiarjo Village, Malang, caused by *Staphylococcus aureus*. Source of infection was chicken rice soto.

**Keywords:** Food Poisoning, *Staphylococcus aureus*, Malang

3. **OUTBREAKS OF FOOD POISONING IN ABIANSEMAL, BADUNG REGENCY**

**Author:** Ni Putu Eka Purnama Dewi

**Background:** On June 6, 2016 has been outbreaks of food poisoning at farewell gathering Abiansemal 6th grade after eating snacks and lunch. Investigation is very important to know the cause of outbreaks and prevent outbreaks in the future. Investigation aimed to find out the magnitude, sources and risk factors for outbreaks of food poisoning.

**Methods:** Case-control method used in the investigation through structured interview to 120 cases and have controls similar to consider gender, age, and schools. Data presented by person, place, time, and quantitative analysis. To ascertain the cause of the poisoning, laboratory examination with sample were taken from snacks, wrapped lunch, patient vomit, stool swab, rectal swab, and clean water sources of food vendor.

**Results:** Outbreaks in Abiansemal is a point source epidemic with incubation period of 1 until 9.5 hours, 57.5% male, 73.33% 10-19 years old, and most of elementary school number 3 Abiansemal Dauh Yeh Cani. There is a significant relationship on snacks and lunch are served to eat with food poisoning outbreaks. Coliform, *Escherichia coli*, and *Staphylococcus aureus* are found on snacks and lunch. Multivariate analysis indicated that the variables correlating with outbreaks of food poisoning were hard-boiled eggs (OR=3,27; 95%CI:1,31-7,48) and shredded chicken (OR=2,61; 95%CI:1,03-7,47).

**Conclusion:** Outbreaks of food poisoning in Abiansemal caused by pathogenic microbes that contaminate the food. Food processing must be considered well from foodstuffs until ready to eaten to avoid food poisoning in the future.

**Keywords** Outbreaks, food, poisoning, pathogenic microbes

4. **Outbreak investigation: Food poisoning in SDIT Permata Hati, Banjarnegara District**  
**Authors: Radian Ilmaskal, Trisno Agung Wibowo, Elisabeth Cucuk**

**Background:** Food poisoning is one of the causes of mortality and morbidity in Indonesia. Mechanism for the investigation and reporting of outbreak is still not good. On October 22th, 2014 was reported there was a food poisoning outbreaks in SDIT Permata Hati after lunch from a Catering. The purpose of this investigation was conducted to find out the risk factor and manner of control.

**Methods:** This study used a case control study design. The cases were people who had sign and symptoms of nausea, vomiting, diarrhea, dizziness, stomach and limp, while the control were people had not sign and symptom but eaten the same food. Data were collected through questionnaire and interviews then analyzed by descriptive and analytic. Samples and vomit was examined in Semarang Health Laboratory.

**Result:** The numbers of respondents were 30 cases and 60 controls. Almost cases complained about nausea (96.7%) and vomiting (93.3%). Mode transmission of this outbreak was common source with incubation period ranged from 2 to 7 hours. Risk factor of this outbreak was puding (OR: 2.80, 95CI; 1.120-7.000). Result of interview and observation that had bad hygiene during the process of preparation of food. Laboratory test showed puding contaminated by *Bacillus Cereus*.

**Conclusions:** Food poisoning in SDIT Permata Hati related to bacterial contamination in preparation, process and presentation of food. We suggest to Banjarnegara Health Office to control hygiene management food in caterings in Banjarnegara. To Caterings must ensure safety and hygiene food starting material procurement until presentation in community.

**Keywords:** Disease outbreaks, food poisoning, Banjarnegara

## **SESSION 4 – EMERALD 3**

### **TOPIC: FOOD AND WATER BORNE DISEASE 3 AND NON INFECTIOUS DISEASE**

1. **INVESTIGATION OF EXTRAORDINARY EVENTS FOOD POISONING IN THE EDUCATION AND TRAINING CENTER OF EAST JAVA, KAWI STREET NO. 40, MALANG**  
**Risma D. Anggraini, C. Umbul Wahyuni, B. Wuryono Kartika**

**Background:** Food poisoning is the most outbreaks in Indonesia and in East Java is the second largest outbreaks after diphtheria. The incidence of food poisoning occurred in Education and Training center of East Java which occurs when the dinner ordered from "CV AMALIA" catering. The purpose of this study was to description of the outbreaks Food Poisoning in Education and Training Center in East Java on 22 April 2015.

**Methods:** This investigation categorized as kohort retrospective epidemiological study. The population is all training participants in Education and Training center of East Java as much as 235 people. Sampling technique used was accidental sampling with 127 people as sample. Techniques of data collection were done by interview using questionnaires and observation. The data were analyzed descriptively to describe the epidemiology of outbreaks of food poisoning in the form of graphs and tables and perform calculations Attack Rate (AR) and Relative Risk (RR).

**Results:** based on the age, the highest AR occurred at the age of 63-67 years, based on the gender, the highest occurrence was by male respondents. Based on the causes of food found the highest RR contained in pindang with the highest complaint is dizziness. Most (41.7%) of the respondents had complaints less than 1 hours after eat with the shortest incubation period was 1 minute and the longest incubation was 5 hours. With these data, it is possible that the source of food poisoning came from chemicals, formalin, but in laboratories cannot be proved. **Conclusion:** The source of food poisoning probably derived from pindang that mixed with formalin with RR of 10.2.

**Keywords:** outbreaks of food poisoning, formalin, pindang

**2. Food Poisoning Outbreak Investigation in Sunan Pandanaran Boarding School, Ngaglik subdistrict, Sleman District, Daerah Istimewa Yogyakarta Province 2016**

**Author: Ruri T**

**Background:** On March 25, 2016, 20 individuals with gastrointestinal manifestation were hospitalized in PKU Muhammadiyah Pakem in Sleman, DI. Yogyakarta. The food served had been donated from student's parent when visit to the boarding school. An investigation was conducted to confirm the outbreak, identify the source of infection, and control measure.

**Metode:** Investigation was conducted in March 26-28, 2016. A descriptive analysis used in this study. Sample is participants were exposed curry mutton (n=37). We interviewed all of them using a form of questionnaire. Data analysis presented by tables, graphs and narrative.

**Result:** 28 cases identified and 100% were male. The majority of cases were students age <18 years (86%). The incubation period ranged from 1-9 jam. Most patients had diarrhea (82,1%), vomit (75%), nausea (75%), abdominal pain (67,9%), and dizziness (50%). Of the 11 suspected foods, only curry mutton is most widely eaten with attack rate of 75.7%. Result of laboratory test showed that curry mutton contained *Staphylococcus aureus*, *Aeromonas hydrophila*, *Klebsiella pneumoniae*, dan *Stomatococcus sp* serta Jamur/Yeast.

**Conclusion:** Food Poisoning occurred in Sunan Pandanaran Boarding School, Sleman District, Daerah Istimewa Yogyakarta Province. Curry mutton was contaminated with coliform bacteria and fungi/yeast commonly caused with unhygienic food preparation practice. Occupants of boarding school were counseled regarding food safety and hygiene practices and were advised to monitor the supply of food in future from outside the school.

**Key Words:** Outbreak Investigation, Food Poisoning, *Staphylococcus aureus*, Food Born Disease.

**3. Food Poisoning Outbreak In Religion Event At Pasir Jaya Village Bogor District 21 August 2016**

**Author : Totok Sutianto**

**Background :** On August 21, 2016 there were six person with nausea, vomit, headache and diarrhea after ate the same menu from religion event in Pasir Jaya Village Cigombong, Bogor. The purpose of the investigation is to verify existence of outbreak, identify the source and the risk factors associated with the outbreak.

**Methods :** Deskriptif was used as study design. The cases were participants in the religion event who consumed one or more food at the religion event, Pasir Jaya Village, Cigombong, Bogor 20 August 2016 and developed nausea, stomachache and diarrhea. The controls were who consumed one or more food at the religion event but remained healthy. Participants were interviewed by structure questionnaire. Data were analyzed using descriptively.

**Results :** 18 cases were identified of 52 people who ate the menu (0 death) with main symptoms stomach ache (100%), nausea (100%) and diarrhea (100%). The majority cases were aged 16-45 years. The outbreak period is was 6 – 25 hours and common source type outbreak. The highest attack rate found in grilled chicken (34,6%).

**Conclusion :** There was an outbreak of poisoning at Pasir Jaya Village, Cigombong, Bogor. The risk factors outbreaks is high risk food ingredients are chicken , beef and coconut milk processed long enough of since mature until consumed.

**Recommendations :** training food safety for food handlers, update knowledge for community to behave clean and healthy living

**4. Synergy Coordination to Improve Non Communicable Disease Control Programs in Kulon Progo, Yogyakarta, Indonesia, 2016**

**Rimawati A.I. Sadarang<sup>1</sup>, Sugiarto<sup>2</sup>, H. Kusnanto<sup>1</sup>**

**Field Epidemiology Training Program, Gadjah Mada University, Yogyakarta, Indonesia 2. Kulon Progo District Health Office, Yogyakarta, Indonesia**

Background: Non Communicable Disease (NCD) control programs had been implemented in Kulon Progo since 2010 but NCD prevalence increased from 2013 to 2015. These study objectives were to identify, to determine and to give recommendation about the priority problem on the implementation of NCD control programs.

Method: This was a descriptive study. Problems were identified by reviewing NCD control programs reports from 2011 to 2015 and by interviewing NCD program officer and the head of surveillance and immunization. Priority problem was determined with Hanlon method by using questionnaire for key persons. Tree problem solving technique was used to further identify root cause.

Result: There were eight respondents, including the head and secretary of district health office, four head divisions, head of surveillance and immunization, and NCD program officer. There were 11 problems identified from 7 NCD control subprograms with Hanlon score ranging from 60-109. The top most problem was from NCD network subprogram. It was the absence of synergy coordination across program to build internal NCD network. The root cause was inattended of all programs to the weekly meeting.

Conclusion: The absence of synergy coordination across program caused program officer lack to understand the contribution of another program in NCD control and the contribution of NCD on the occurring of another health problem. Formal regulation from the head of district health office was needed as law for all programs to attend weekly forum. As follow up, we recommended that inter program meeting be held regularly so that all the staff would be informed and updated about NCD.

Keywords: Inter Office Communication, NCD Control Programs, NCD Network, Synergy Coordination.

**Oral presentations 5 and 6**  
THURSDAY, 8 SEPTEMBER 2016/15.00-16.00

| <b>SESSION 5 : EMERALD 2<br/>HEALTH PROBLEM ANALYSIS</b> | <b>SESSION 6 : EMERALD 3<br/>HIV STI 1</b> |
|--|--|
| Husni  | Firman Suryadi Rahman                      |
| Jonri Maringan Pandiangan                                | Haryadi                                    |
| Nasir Ahmad  | Hesti Yuningrum                            |
| Siti Nurfadilah  | I Made Winarta                             |

## SESSION 5

### TOPIC: HEALTH PROBLEM ANALYSIS

- The Priority Problems of Communicable Diseases in Kulon Progo District, Yogyakarta, Indonesia, 2015**  
Husni<sup>1</sup>, T. Baning Rahayujati<sup>2</sup>, H. Kusnanto<sup>1</sup>  
<sup>1</sup>Field Epidemiology Training Program, University of Gadjah Mada, Indonesia <sup>2</sup>Health Office of Kulon Progo District, Yogyakarta, Indonesia (husnigapri@gmail.com)

**Background:** Morbidity and mortality of communicable diseases has fluctuated last five years in Kulon Progo District. Communicable diseases control can not be separated from the problem of limited resources so that in the planning for communicable disease control programs need to prioritize problems. This research objective was to set priority problems of communicable diseases in Kulon Progo District.

**Methods:** This research used a descriptive study based on data of the local situation, mortality, morbidity, and indicators of communicable diseases control program in the last five years. The Hanlon method was used to prioritize problems based on four criteria: size of the problem, seriousness of the problem, effectiveness of interventions and PEARL factors (propriety, economics, acceptability, resources, and legality). We interviewed the Health Officers of the Kulon Progo District.

**Results:** 10 communicable diseases were identified as problems with score ranging from 25.74 – 36.73. These were Malaria (36.73), Dengue Hemorrhagic Fever (DHF) (35.37), Pulmonary Tuberculosis (34.33), Measles (32.53), Human Immunodeficiency Virus/ Acquired Immunodeficiency Syndrome (HIV/AIDS) (32.45), Gonorrhea (29.41), Leptospirosis (28.16), Tetanus (27.02), Rubella (26.22), Diarrhea in children under five years (25.74). These problems has not met the eradication of communicable diseases target such as Malaria, DHF, and Tuberculosis. Based on case fatality rate were HIV/AIDS, Leptospirosis, and Tetanus. One of the diseases that cause outbreak was Measles. Morbidity of Gonorrhea, Rubella, and Diarrhea has increased last five years.

**Conclusions:** The priority problems of communicable diseases in Kulon Progo District were Malaria, DHF, Pulmonary Tuberculosis, Measles, and HIV/AIDS. The big five control programs diseases should be the main focus in the planning and developing of communicable diseases control program to be follow by other communicable diseases control based on their priority score.

**Keywords:** Communicable diseases, hanlon method, kulon progo, priority problems

**2. Health Problem in Bantul District, Daerah Istimewa Yogyakarta**  
**Jonri M. Pandiangan<sup>1</sup>, Berti Murtiningsih<sup>2</sup>, Bintarta H. Susanto<sup>3</sup>**  
**1 Field Epidemiology Training Program (FETP), Gadjah Mada University 2 Daerah Istimewa Yogyakarta Region Health Office 3 Bantul District Health Office**

**Background.** Health problem in Bantul District complex enough. It could be seen by differences from performances and target of each health problem. Limited of resources made need to determine health priority. Aim of this studi was to determine heatlh priority and gave recommendation for solved problem.

**Method.** This is a descriptive study using Hanlon Method to determine the priorities for each of the health programmes inn 2013-2015.. Questionnary was used to collected data. Health problem with highest score indicated that the problem was highest priority. Key personnel were interviewed. R

**esult.** There were 17 structural official from Bantul Health District who have finished answer the questionnaire. Analysed used Hanlon method result five health problem in Bantul District which identificated as problem which was Maternal Mortality (55,44), Child Mortality (52,86), DHF (48,60), Hypertension (38,17), and Diabetes Mellitus (35,30). Maternal Mortality was highest health priority with the highest score. The causes of Maternal Mortality in Bantul District were eclampsia and bleeding.

**Conclusion.** Did not achieved the target for decreasing maternal mortality rate was the first priority of effort health in Bantul District 2016. We need to increased quality of Antenatal Care (ANC) in Bantul District.

**Keyword.** Health Priority, Hanlon, Maternal Mortality, Bantul

**3. Malaria Control Situation Analysis In Magelang Regency 2015: Obstacle To Maintain Malaria Elimination-Status**  
**Nasir Ahmad<sup>1</sup>, Isworo Adi<sup>2</sup>, Indriani Citra<sup>1</sup>**  
**1 Field Epidemiology Training Programs, Gadjah Mada University, Indonesia 2 Lecturers D-3 nursing, Polytechnic Health, Indonesian Ministry of Health**

**Background:** Magelang regency received malaria elimination certificate in April 2014, but signals epidemic back obtained in April 2015. Malaria epidemics had occurred for two months and until the end of December indigenous cases could still be found. Malaria situation analysis be held to find out descriptions of situation and control malaria.

**Method:** Rapid assessment method was done by adopting the methodology in the protocols and methods for malaria situation analysis from WHO (2003) and by using desk review as the reference for the research process in malaria control method in a region with similar condition to Magelang regency. Data collections were done through interview and observation.

**Result:** April 2 cases indigenous in 2015 found increased to 37 cases in May and the peak in June 56 cases. Previous in March found cases import. Until December malaria case almost dominated by the indogenous (97%). There are 5 puskesmas and 5 microscopic in receptive malaria. Each puskesmas had 3 Village Malaria Workers (JMD). JMD actively looked for malaria cases with fever symptoms. The treatment used was artemisinin combination treatment. Not all people use netting insecticide. Policy in the village on malaria migration surveillance was still not available in all receptive villages.

**Result:** In malaria elimination area, there should be regulation that govern malaria migration surveillance to reduce import cases of malaria as early as possible because import case might lead to outbreak or reintroduction of the parasite. Regent should urge the government institution through a circular letter to set new regulation concerning malaria surveillance migration in order to reduce the potential outbreak and also to involve the society so that they could actively participate in malaria control.

**Keywords:** Malaria, situation analysis, malaria elimination, Magelang Regency

**4. The Evaluation of Neonatal Health Care Program to Minimizing Infant Mortality Rate in Kulon Progo District, Yogyakarta, Indonesia, 2014**  
**Siti Nurfadilah H.1, Sugiarto<sup>1</sup>, Riris Andono Ahmad<sup>3</sup>**  
**1 Field Epidemiology Training Program (FETP) Gadjah Mada University 2 Kulon Progo District Health Office**

**Background:** Infant mortality rate (IMR) is one of important indicators in determining health of a community. In Indonesia, 56% IMR happened in neonatal period. In Kulon Progo, neonatal death still occurred despite all delivery assisted by professional health staff. The purpose of this study to evaluate the neonatal health care in Kulon Progo district.

**Methods:** This is a descriptive study. Neonatal death is defined as death infant that age 0-28 days. Data was collected from reports from primary health center (PHC) from January until December 2014. Health staff from PHC and Kulon Progo district health office (DHO) were interviewed. WHO guideline and Indonesia Ministry of Health (MoH) guideline was used to assess neonatal care.

**Results:** There were 5.305 babies born alive and 33 neonatal deaths. The most common causes are low birth weight, late check up their pregnancy condition in PHC. In PHC there are 1 midwives coordinator and more than 5 midwives. They have consultative meeting every months (76.19%), neonatal services coaching against the midwives (100%), the incidental of consultative meeting (95.24%), facilitative supervision (80.95%), counseling services (85.71%), home visit (76.19%). There are 1 midwives coordinator (4.75%) and 3 midwives (14.29%) never get a training. The coverage of neonatal care at first neonatal visits (99.92%), complete neonatal visit (96.49%), detections of neonatal complications (100%) and management of complicated neonatal case (100%).

**Conclusion:** The output of neonatal health care program have good result, but there are still several problem need to improve to increase cooperation and communication with hospital in referral system, and conduct quality evaluation neonatal services coaching against the midwives.

**Kata kunci:** Evaluation, Infant Health, Midwifery, Pregnancy

## SESSION 6

### TOPIC: HIV STI 1

#### 1. **Determining Problem Priorities of HIV AIDS – Sidoarjo, 2014** **Firman S. Rahman, A. Hargono, F. Susilastuti**

**Background:** Its cumulative number of HIV sufferers is 19.249, while the number of AIDS sufferers is 8.976. In Sidoarjo, the number of HIV/AIDS cases tends to increase in the last four years. Besides, Sidoarjo is one of six regencies with the highest number of AIDS sufferers in East Java. The objective of this research was to determine cause priority of the problem and root problem of HIV and AIDS in Sidoarjo.

**Methods:** The methods used in the analysis of the problems were observation and documentation. The determination of problem priorities was done by using CARL method. The determination of the root causes of the problems was done by using Fishbone Diagram. Recommendations were given based on the result of root causes analysis.

**Results:** The number of identified problems was 11. The programs that did not achieve the targets were STDs scope that was still 21%, PMTCT scope that was still 0%, PLWHA scope that were sent to Civil Society Organizations (CSOs) for care that was still 15%, and PLWHA patients that still had ARV treatment of 33.5%. The problem that became the first priority problem was the scope of STDs in 2014 which was still 21% with CARL score of 11472.

**Conclusions:** The problem that became the priority was STDs scope that was still 21%. The root causes of the problem were not all the program holders in Puskesmas (health center) knew about STDs form, most program holders did not get any training yet, some program holders had double job, not all Puskesmas had syphilis reagent and rotator. Recommendations for solutions are training for program holdres, and holding screening programs.

**Keywords:** STDs, CARL, HIV/AIDS, Priorities

**2. PREDICTORS OF ACHIEVEMENT OF NORMAL NUTRITIONAL STATUS: IN MALNOURISHED CHILDREN ON ANTIRETROVIRALS AT GENERAL HOSPITAL SANGLAH BALI YEAR 2010-2015**

**Haryadi<sup>1</sup>, Sawitri AAS<sup>1,2</sup>, Kumara KD<sup>3</sup>, Putra IWGA<sup>1,4</sup>, Merati TP<sup>5</sup>**

**<sup>1</sup>Public Health Postgraduate Program, Udayana University, <sup>2</sup>Department of Community and Preventive Medicine, Faculty of Medicine Udayana University, <sup>3</sup>Department of Pediatrics, Faculty of Medicine, University of Udayana, <sup>4</sup>Public Health Sciences Program Udayana University, <sup>5</sup>Department of Internal Medicine, Faculty of Medicine, University of Udayana Corresponding author: haryadiarashyd@gmail.com**

Background: Malnutrition is very common in Children with HIV / AIDS. Antiretroviral therapy (ART) improves the nutritional status, however information about predictors affecting the changes of nutritional status is limited and inconsistent.

Methods: The retrospective survival study analyzed secondary data of 84 undernourished children receiving ART in Sanglah Central Referral Hospital between 2010-2015. Demographic, clinical and socio-economic characteristics at ART initiation was linked to the achievement of normal nutritional status (z-score  $\geq -2$  SD). Kaplan Meier analysis was used to obtain the incidence rate and median time to achieve normal nutritional status and Cox proportional hazards models to identify its predictors.

Results: During the study period 60.20% of children achieved a normal nutrition status. The incident of children achieving normal nutritional was 19/100 months, and a median time of 4 months 10 days. Children with birth weight  $\geq 2500$  g (AHR = 5.41; 95% CI: 1.76-16.61), no candidiasis (AHR = 3.72; 95% CI: 1.27-10.93), early clinical WHO stage I (AHR = 1.68; 95% CI: 0.52-5.22) and a faster introduction of ART (AHR = 0.91; 95% CI: 0.83-0.98) were predictors to achieve normal nutritional status. While the variables age, sex, breastfeeding, CD4 percentage, hemoglobin levels, opportunistic infections diarrhea, tuberculosis, pneumonia and primary caregiver (PCG) and PCG's occupation cannot be used as predictors in this study.

Conclusion: The clinical characteristics of children are predictors of achieving a normal nutritional status.

Keywords: survival analysis, children with HIV/AIDS, nutrition HIV/AIDS, Indonesia Statement: This study is part of thesis in the Stream of Field Epidemiology Master Program University of Udayana

**3. Relation Between Psychosocial Stress And Bacterial Vaginosis (BV) In Female Sex Worker (FSW) – Banyumas, Central Java, 2015**

**Author: Hesti Yuningrum**

Introduction: Bacterial Vaginosis (BV) is resulted by disrupting of normal bacteria balance in vagina. It happens on women with active sexual activity including female sex worker (FSW). BV effects increasing risk of HIV, gonorrhea disease, and chlamydia infection. Level of stress can cause mutation of vaginal immunity. Prevalence of BV is high and varies entire the world; e.g in pregnant women (28,1%), adolescence (20%), positive HIV (36%), FSW (62,9%). Prevalence of BV in Indonesia is ranged between 30,7% to 32,5%. BV on FSW in Banyumas District are in 2011 (56,4%), 2012 (48,8%), and 2013 (62,9%). This study aims to know relation between psychosocial stress and BV on FSW.

Method: Analytical observational study with case control method was used. Cases were FSW with positive of BV diagnose. Controls were FSW with negative of BV diagnose. Subjects were 164 of FSW (Case=82 FSW; Control=82 FSW). This study used structured questionnaire as a tool. Data were analyzed into univariate, bivariate using chi-square test, and multivariate using logistic regression.

Result: Bivariate analysis showed significant relationship between stress psychosocial and BV with high category. It also happened on inconsistent of condom using and vaginal douching with the frequency  $\geq 4$  times per week. There were no significant relationship on age, smoking, number of sexual partner, and using of contraception. Multivariate analysis showed psychosocial stress with high category was the most influential factor of BV (OR=2,83, CI 95%=1,15-6,95, p-value=0,023).

Conclusion: BV has higher effect on person who has high psychosocial stress than low of it is. It is important to arrange and minimize psychosocial stress well so as not to cause health problems.

Keywords: Bacterial Vaginosis, psychosocial stress, female sex worker (FSW), Banyumas

#### **4. The Indonesia Military Response To HIV/AIDS: A Focus In The United Nations Peacekeeping Operations**

Authors : I Made Winarta

Background: Military personnel are at increased risk of getting HIV infection due to their mobility and nature of work. Indonesia also participates to United Nations peacekeeping operations since 1957. In 1993 seven Indonesia peacekeepers returned from a mission with HIV. It was the first HIV reported-case in military. A Survey carried out in 2014 showed that knowledge of HIV among soldier is low.

Methods: this survey was descriptive observational with the entire population in Indonesian contingent in UNIFIL 2014 using questioner as instrument. Besides it is mainly used the primary data from Indonesia military headquarters. Most of the data are unpublished.

Result: 1 (One) HIV in military personnel was reported to the Indonesia military health Centre in 2000, the same number case was reported in 2001, and in 2002 there were 2 (two) cases. The HIV care rose into 23 in 2003 and keeps going up. The democratic Republic of Congo is the destination of peacekeepers since 2003. Later on, in 2006 up to now Indonesia send peacekeepers to Lebanon as well. The HIV cases among Indonesia sends the similar pattern to Indonesia soldier in general. In post-deployment test after peacekeeping operation accomplished, 1(one) HIV case in both 2005 and 2006 found to be 2 (two) in 2007 and 4 (four) in 2008, while HIV issues among peacekeepers need to be addressed, the HIV epidemic among soldier posted in Papua Island may not be underestimated. This situation is reflected by a result survey in 2014, showing that HIV prevalence among soldier in Papua Island is the highest, which is 1.2%, compared to 0.1-0.3% in other military-bases

Conclusion: The military has the HIV prevention program in which the sustainability of this program should be ensured by the Chief of Indonesia Military.

Keywords: HIV, AIDS, Military, Peacekeeping

**Oral presentations 7 and 8**  
THURSDAY, 8 SEPTEMBER 2016/16.15-17.15

| <b>SESSION 7 : EMERALD 2<br/>HIV STI 2 AND INJURY</b> | <b>SESSION 8 : EMERALD 3<br/>VACCINE PREVENTABLE DISEASE</b> |
|---|--|
| Nur Aini K  | Akhmad Mukhibin  |
| Sri Nurjannah   | Evawangi   |
| Yudi Pradipta   | Junaedi  |
| Desy Eliana   | Nenden Hikmah Laila  |

## SESSION 7

### TOPIC: HIV STI-2 AND INJURY

- Determinant Factors for Not-Adherence to Antiretroviral Therapy in Sardjito Hospital, Yogyakarta, Indonesia**  
**Authors: Kusmayanti, Nur Aini<sup>1</sup>; Murtiningsih, Berty<sup>2</sup>; Ahmad, Riris Andono<sup>1</sup>**  
**1Field Epidemiology Training Program, Universitas Gadjah Mada 2Yogyakarta Provincial Health Department**

**Background;** In Indonesia, number of reported cases is increasing from <3.000 in 2004 to >200.000 in 2014. Adherence to antiretroviral therapy (ART) is associated with long-term virological suppression. However, adherence to ART is hard to do because of medical expenses, distance to ART services, clinical condition, and side effect of ART. This study determine related factors of not-adherence to ART.

**Methods;** We conducted case-control (1:1) involving 204 patients who start using ART between January 2008-February 2014, naïve, and ≥18 years old in Sardjito – a referral hospital in Yogyakarta and Central Java Province. We collected all of the data from medical records. Nurses assessed patient's adherence through interviewed them when they came to hospital – does drug exhaust or not?. Patients who consumed >95% ART during the first three months based on medical records were categorized as adhere. Otherwise, patients were categorized as not-adhere.

**Result;** In bivariate analysis, sex (OR; 95% CI: 1,38; 0,79-2,41), age (OR; 95% CI: 0,93; 0,62-1,42), religion (OR; 95% CI: 0,93; 0,54-1,59), address (OR; 95% CI: 1,03; 0,89-1,19), occupation (OR; 95% CI: 1,19; 0,86-1,65), education (OR; 95 CI: 1,08; 0,81-1,45), marital status (OR; 95% CI: 1,43; 0,82-2,49), HIV risk factor (OR; 95 CI: 0,87; 0,58-1,29), CD4+ (OR; 95% CI: 1; 0,47-2,12), clinical stage (OR; 95% CI: 1; 0,67-1,49), tuberculosis (OR; 95% CI: 1,94; 0,97-3,87), and NNRTI (OR; 95% CI: 1,09; 0,61-1,96) were not significantly associated with not-adherence. In final model that included both tuberculosis and nevirapine, had tuberculosis was statistically significant with not-adherence (OR (95% CI): 2,27 (1,07-4,83).

**Conclusion;** Tuberculosis is determinant factor for not-adherence to ART if patients get nevirapine. Tuberculosis causing more drugs that will be patients got and nevirapine arise more side effects compare with efavirenz. Medical doctors are advised to avoid nevirapine in patients with tuberculosis. If nevirapine is prescribed, patients should be closely monitored.

**Keywords;** HIV, patients, tuberculosis, adherence, antiretroviral, vulnerable

**2. HIV/AIDS, The Most Priority Health Issue in Wonogiri District, Central Java Province, Indonesia**  
**Sri Nurjannah 1, Suprio Heriyanto<sup>2</sup>, Trisno Agung Wibowo<sup>1</sup>**  
**1 Field Epidemiology Training Program, Gadjah Mada University, Indonesia 2 Wonogiri District Health Office, Central Java, Indonesia**

**Background:** An estimated 36.9 million number of people were living with HIV worldwide in 2014 which 34.3 million an adult. Approximately 2.0 million people were newly infected and 1.2 million people died from AIDS. In 2014, Indonesia HIV reached 150.296 cases and 5430 people died from AIDS. This study to described epidemiology of HIV and analyze the problem in Wonogiri District.

**Method:** It was descriptive study with analyze 2011-2015 HIV/AIDS data from Wonogiri District Health Office (DHO). The HIV officer was interviewed with structured questionnaire to obtain information of HIV situation.

**Result:** In 2013, there were 51 cases of HIV and become 136 cases in 2015. The incidence increased from 0.5 per 10.000 population to 1.3 per 10.000 population in 2013 and 2015 respectively. It was exceed incidence target number of MDG's with less of 0.5 for 10.000 population. The number of people died from AIDS declined 13 cases in 2013 become 7 cases in 2015. People with HIV most commonly found from immigrants (56,8%) and the second group was housewife (14,0%). The proportion of people living with HIV who have access to antiretroviral decreased from 89.6% in 2013 become 66.7% in 2015 due to high mobilization.

**Conclusion:** HIV is a priority issue in Wonogiri district. Wonogiri DHO should strengthen HIV screening and provide education health related to HIV on high risk population such as immigrants, and providing HIV counseling about antiretroviral for people living with HIV.

**Keyword:** HIV/AIDS, Immigrants, Wonogiri District.

**3. PREVALENCE OF HIV INFECTIONS, KNOWLEDGE AND SEXUAL PRACTICES AMONG ESTABLISHMENT FEMALE SEX WORKERS IN ROWOSARI ATAS, SEMARANG DISTRICT, CENTRAL JAVA PROVINCE, INDONESIA**  
**Author: Yudi Pradipta**

**Background:** HIV continues to be a major global public health issue, having claimed more than 34 million lives so far. About 2 million people becoming newly infected with HIV, and approximately 13% of Female sex workers (FSWs) in Indonesia have infected HIV. This study aims to investigate the prevalence of HIV, knowledge and sexual practices among FSWs in Rowosari Atas, Semarang District, Central Java Province, Indonesia.

**Methods:** Cross sectional study was conducted on November-December 2014, included all willing establishment-FSWs in Rowosari Atas. The FSWs were recruited by total sampling and asked for written agreement to participated. Blood specimen tested by Rapid HIV Test, and the participants interviewed by using questionnaire about knowledge and sexual practices.

**Results:** A total of 133 FSWs are involved in this survey, while 131 FSWs completed the interview. The prevalence of HIV was 9,02%. About 80% of FSWs aged 20-39 years old, and 83,97% have sexual experience aged under 20 years old. 87% of FSWs are low educated, and 10,69% did not know at all about HIV transmission, but 81,68% of FSWs did not have comprehensive knowledge about HIV. 49,62% of FSWs did not use condom in their last sex episode, and 83,97% use condom inconsistently in the last 6 month, 53,40% of FSWs have practiced oral sex and 6,11% have practiced anal sex.

**Conclusions:** More FSWs were low educated, low knowledge, use condom inconsistently, and unsafe sexual practices. HIV positive cases were follow up for treatment. We must ensuring comprehensive intervention (e.g condom promotion and peer education) and condom utilization consistently, in order to increase safe sexual practices and control HIV transmission.

**Keywords:** HIV, female sex workers, knowledge, sexual practices

**4. Risk aggressiveness and speed on injury severity due to motorcycle associated traffic accidents in Bantul District, Indonesia**

**Desy Eliana<sup>1</sup>, Rahardyan Magetsari<sup>2</sup>, Yayi Suryo Prabandari<sup>3</sup>, Theodola Baning. R.<sup>4</sup>**

**Background :** In 2013, Bantul District Police Department recorded the total number of traffic victims, 1,637 suffered minor injuries, 30 people were seriously injured and 148 people died. The majority of cases occur in motorcycle accidents by 689 cases compared to traffic accidents on other vehicles. The biggest causes of collisions are driver that are impatient and will not budge (56%) and high speed (11%). This research aimed to determine the effects of aggressiveness and speed on the severity of injuries caused by traffic accidents among motorcyclists or riders in Bantul.

**Methods :** Design of this study was cross sectional. The total sample was taken with purposive sampling method to 271 motorcyclists suffering from serious injuries and minor injuries due to traffic accidents recorded in August to December in Bantul District Police Station. Based on variable analysis is aggressiveness, speed limits, age, gender, location of accident, accident history, time of accident, weather, ownership of SIM C, vehicle type (CC cylinder), involvement of other vehicles and compliance of helmet use. The bivariate analysis used Chi Square/Fisher Exact, the interaction and confounder analysis used Mantel Haenszel and the multivariate analysis used logistic regression.

**Result :** Based on the multivariate analysis, aggressiveness can increased the risk of severity injury (RP: 8,7, 95% CI: 2,66 to 28,44) and high speed accounted for the risk severity injury (RP: 1,5, 95% CI: 0,37 to 6,05) even after adjusting for location of accident on arteri (RP: 0,4, 95% CI: 0,10-1,97), location of accident on kolektor (RP: 0,12, 95% CI: 0,02 to 0,50), gender (male) (RP: 3, 95% CI: 0,81 to 11,58), have a history of accidents (RP: 4,7, 95%CI: 1,42 to 15,65), vehicle type (CC cylinder) > 125 cc (RP: 2,9, 95% CI: 0,74 to 11,84), involvement of other vehicles (RP: 0,031, 95% CI: 0,00 to 0,51), rainy weather (RP: 1,23, 95% CI: 1,23-15,35) dan time of traffic accident morning – afternoon (RP: 2,73, 95% CI: 0,83-8,99).

**CONCLUSION :** High aggressiveness increased the risk of severity of injury due to accidents among motorcyclist. High-speed accounted for the risk severity of injuries due to traffic accidents to the motorcyclists. Recommendation, everybody are expected to reduce aggressive behavior in driving, to drive at normal speed.

**Keyword :** the severity of the injuries, traffic accidents, aggressive

## **SESSION 8**

### **TOPIC: VACCINE PREVENTABLE DISEASE**

**1. Analysis of economic burden of outbreaks measles In Daerah Istimewa Yogyakarta, 2015**

**Akhmad. Mukhibin<sup>1</sup>, Hari Kusnanto<sup>2</sup>, Riris Andono Ahmad<sup>3</sup>**

**FETP- UGM Yogyakarta**

**Background:** Cases of measles in DIY 2014 reached 1,222 cases. This puts the number of DIY with the third highest number of measles cases after Jakarta and Aceh. Outbreaks measles in 2014, increasing 10 times with 262 cases in 2015, one time with 14 cases. This study aimed to analyze the economic burden due to outbreaks of measles in the household sector.

**Methods:** Descriptive study with survey design, data collected direct and indirect costs for patients exposed to measles, conducted interviews of 177 respondents using a questionnaire. Secondary data in the form of outbreaks of measles in 2014 and 2015. Research in February-March, 2016.

**Results:** The number respondent who visit health facilities to a number of 163 patients (92.09%). Medical costs IDR 17.982.000, non-medical costs IDR 7.804.900, total direct cost IDR 25.786.900, indirect costs IDR 11.720.000. The economic burden of measles outbreak IDR 37.506.900 (average IDR 211. 900). Generally the cost is issued (Out Of Pocket) amounted to 6.32% of household income, not yet catastrophic, but there are few households, 39(22,03%) households experiencing catastrophic disaster. Regression analysis showed the duration of illness more than 10 days ( $p = 0.002$  and hospitalization ( $p = 0.000$ ))

Conclusions: The economic burden of outbreaks of measles in the DIY 2015 was IDR 37.506.900. This has a catastrophic impact on the 39 (22.03%) households. The factors that were related to the economic burden is the duration of illness and inpatient status. Need advocacy the use of health insurance and prevention of measles by immunization.

Keywords: cost, economic burden, measles outbreak, catastrophic

**2. Food Poisoning Outbreak Investigation in Sunan Pandanaran Boarding School, Ngaglik subdistrict, Sleman District, Daerah Istimewa Yogyakarta Province 2016**

**Author: Evawangi**

Background : Diphtheria is an infectious disease caused by the bacterium *Corynebacterium diphtheria*, which primarily infects the throat and upper airways, and produces a toxin affecting other organs. The main characteristics are sore throat, low fever and swollen glands in the neck, and the toxin may, in severe cases, cause myocarditis or peripheral neuropathy. The disease is spread through direct physical contact or from breathing in the aerosolized secretions from coughs or sneezes of infected individuals. Number of diphtheria cases in Indonesia in 2014 was 430 cases ( Incidence Rate 0.17 / 100.000 people ) with 21 of deaths ( 4.8 % ). DPT 3 National coverage was 95 %. Bogor district is a one of district in West Java which Diphtheria is still a health problem. Almost every year diphtheria outbreak was happened. There was 6 diphtheria outbreak since 2010 until 2016 in Bogor district. Based on report from PHC Cileungsi about 1 death children at Cipto Mangunkusumo Hospital caused of diphtheria from Al Fatah boarding school Cileungsi and report from Mitra Keluarga Hospital that diphtheria suspect inpatient from same place, we conducted investigation. The objectives are to ensure that diphtheria outbreak was happened and identified risk factors.

Method : This is a case series study, the data collected by interview to patient family, Alfatah boarding school manager, and Kader of Posyandu. We observed risk factor such as DPT immunization coverage. Oropharyngeal swab on population at risk by team from Central of Technical Health Environment-Control and Prevention ( BBTCL-PP ) Jakarta.

Result : There was diphtheria outbreak at Al Fatah boarding school. Number of cases were 2. First case was a boy ( A ), 5 years, he was a kindergarten student at Al fatah boarding school. He was febrile on February 1, 2016. He carried to Permata Cibubur Hospital on February 2 and individual cared at home. On February 3, he was dispneic and carried out to Cileungsi Hospital. The doctor at Cileungsi Hospital advised to refer him to Cipto Mangunkusumo Hospital. The boy was conducted tracheostomy and got ADS. But he died on February 4, 2016. The Risk factor is lack of DPT immunization. Second case was a boy , 3 years old, and kindergarten student at the same place with first case. He was sick on February 2, 2016. He was referred from Bukaka Clinic to Cipto Mangunkusumo Hospital to. He was survived. Risk factors were lack DPT immunization and his father ever go to Surabaya and Bali on Desember 2015. Oropharyngeal swab was conducted to 90 population at risk, the laboratory was negative. Promotion about Immunization to all people at Al fatah boarding school and in around. Erythromycin was given to closed contact for profilaxis and Outbreak Immunization Respon for prevention.

Conclusion : Lack of DPT immunization is a risk factor to diphtheria outbreak. Need intensif promotion about immunization benefit to parent and community.

Key word : Diphtheria, Outbreak, Bogor district

**3. Outbreak of Clinical Measles in Teritih Village, Walantaka Sub District, Serang City, Banten Province, 2015**

**Author : Junaedi**

Background: Measles is a major cause of child deaths in 2000. The decline in measles deaths in 2015 is targeted to 95% compared to 2000. The decline in measles incidence to less than 5 cases per 1 million population. Target Elimination of measles in Indonesia in 2000. Based on reports from Health Center to Health District of Serang City, in Teritih Village that there have been cases of clinical measles and as many as 8 cases and after done investigation a total of 28 cases. We investigated an outbreak of fever with rash to confirm diagnosis, describe the distribution of cases and determine the etiology.

Methods: Be descriptive epidemiological analysis that describe an outbreak according to the people, places, and the time variable. We identified cases using the WHO case definition of measles in Teritih village from 13 July 2015 to 18 August 2015. We describe cases by age, gender, and immunization status. We included 28 children between the group of 6-156 months detected by active house to house search in the study.

Results: We identified 28 (Attack Rate 24.6%) cases of measles out of 114 children with clinical symptoms of fever, rash, cough/runny nose and red eyes. Case Fatality Rate 3.6 % (1 cases). The attack rate was highest in the group of 12-48 months (47.6%), Females (62%). The vaccination coverage was only 42.8%. Results of the investigation it was found that less cold chain and measles immunization status.

Conclusion: Measles outbreak occurred due to low vaccine coverage and cold chain. We recommended supplementation of vitamin A for each case, expanding the one dose vaccination coverage with special plans for they areas, examine ways to increase demand for vaccination, and improve measles surveillance.

Keywords: measles, outbreak, vaccination, Teritih

#### **4. Outbreak Investigation of Hepatitis A Virus (HAV) in Tangerang District in 2016**

**Author: Nenden Hikmah Laila**

Background: Hepatitis A is a viral liver disease that can cause mild to severe illness. Epidemics related to contaminated food or water can erupt explosively, such as the epidemic in Shanghai in 1988 that affected about 300 000 people. In developing countries with poor sanitary conditions and hygienic practices, most children (90%) have been infected with the hepatitis A virus before the age of 10 years. 1.2% of population in Indonesia suffered from hepatitis in 2013 which is about 2,981,075 people. Total outbreaks of hepatitis A in three provinces and four districts / cities in 2014 is 282 cases. This outbreak investigation conducted to describe the outbreak and explain the factors outbreaks of hepatitis A in Tangerang district in 2016.

Methods: This is a case-control study. Investigations conducted on March 21-22, 2016 in Legok sub-district Tangerang district. The sample size was 45, control 95, and food handlers 35 so that total sample was 175 people. The data collected from primary and secondary. Primary data includes identification of respondents and risk factors Hepatitis A. Investigations conducted by interview using a structured questionnaire and environmental observation. Secondary data is taken based on report of community Health centers, Tangerang district health office records and laboratorium result by BBTKLPP Jakarta.

Results: Outbreaks of hepatitis A by age group 10-15 years was 43 people (38.39%) more than > 15 years was 2 people (7.14%). By sex more women were 24 people (35.29%) than men were 21 (29.17%) and OR was 0,71. The highest proportion was in class V SDN 1 Legok was 7 (63.64%). The cases occurred on March 9, 2016 by 4 cases. Attack rate of hepatitis A was 9.76% and CFR 0%. The risk factors include a history of eating together OR (2,06), washing hands OR (2,21), consumption of raw foods (1,86). Hygiene personal of food handler was horrible and environmental sanitation was also bad.

Conclusions: Outbreaks of hepatitis A occur due to various risk factors including a history of eating together, hand washing with soap, and the consumption of raw food. Hygiene personal of food handler was horrible and environmental sanitation was also bad. Prevention efforts can be done through improvement of school sanitation and education about hygiene personal and immunization of hepatitis A.

Keyword: hepatitis A, outbreak investigation, hygiene personal, imunization

## ***Oral presentation 9***

FRIDAY, 9 OCTOBER 2016/10.15-11.30

| <b>SESSION 9 : BALLROOM</b>  |
|--|
| <b>PROGRAM EVALUATION, VACCINE PREVENTABLE DISEASE AND MATERNAL, CHILD &amp; REPRODUCTIVE HEALTH</b> |
| Aning Isfandyari   |
| Destri Sufiyani  |
| Gaby Gabriella Langi   |
| Nuryanto   |
| Prima Kurniati Hamzah  |

### **SESSION 9**

#### **TOPIC: PROGRAM EVALUATION and MATERNAL, CHILD & REPRODUCTIVE HEALTH**

**1 Evaluation of Integrated Health Post for Non-Communicable Disease Program in Gunungkidul District, Yogyakarta, Indonesia 2015**

Aning Isfandyari 1, RA Ahmad 1, S. Raharto 2 1 Field Epidemiology Training Program, Gadjah Mada University, Indonesia 2 Gunung Kidul District Health Office, Yogyakarta, Indonesia

Background: Ministry of Health establish Integrated Health Post for Non-Communicable Disease (Posbindu PTM) as one of strategies to control NCD in Indonesia. In Gunungkidul district, initiation of Posbindu PTM was started in 2012, but the quality of Posbindu PTM never evaluated. This study was to evaluate the quality of Posbindu PTM in Gunungkidul 2015.

Method: It was a descriptive study to evaluate input, process, output and outcome of Posbindu PTM. Subject of evaluation was one officer of District Health Office (DHO) and 30 officers of Health Centers. Primary data was collected through interview and observation.

Result: Only 12 of 30 Health Centers had formed Posbindu PTM in 2015. There were total 23 Posbindu consist of 14 Posbindu basis (without laboratory) and 9 major Posbindu (with laboratory). Cadres in each Posbindu was sufficient. Posbindu kit was still used alternately by 57% Posbindu. Not all Posbindu had Monitoring Card and promotion media. Funding shortage occurred in 44% Posbindu. Only 61% Posbindu was performed regularly once a month. For major Posbindu, laboratory test was conducted only to those who were willing to pay. Online reporting was only submitted by 22% Posbindu. Coverage of all activities was still in red indicator (below the target), whereas the proportion of NCD risk factors was green for smoking and lack of fruit and vegetables consumption and red for lack of physical activity, obese, hypertension, pulmonary function, hyperglycemia and hypercholesterolemia. Outcome data was not available.

Conclusion: Posbindu PTM in Gunungkidul is still experiencing problems in all aspects (input, process and output). Improvement is needed such as provisioning the facilities and refreshing capacity of officers regarding online reporting.

Keyword: Progam Evaluation, NCD, prevention, community-based, Gunungkidul

## **2 Evaluation of NCD Community Health Care (Posbindu) Program In Salatiga District, Central Java Province 2015**

Destri Sufiyani<sup>1</sup>, Trisno Agung Wibowo<sup>1</sup>, Dyah W. Widarsih<sup>2</sup>

<sup>1</sup> Field Epidemiology Training Program (FETP), Gadjah Mada University

<sup>2</sup> Salatiga Health Office, Central Java

**Background :** Based on analysis of health problems in Salatiga Health Office 2015, the most difficult to implement of health effort is the handling non-communicable disease (NCD). One of program is early risk detection with the formation of NCD Community Health Care(Posbindu). Posbindu formation officially began in 2013. However,the number of NCD cases remain high. This evaluation aims to determain program management of Posbindu in Salatiga.

**Methods :** Observational descriptive. Evaluation was done by input,process,output and outcome. Subjects this study were cadre(n=19), program manager health centre(n=6) and program manager Salatiga health office(n=1). Study period may–july. Data was collected by interview and observation using questionnaires.

**Results :** Input;From 7 program manager, 100% is D3, 86% work ≥2years, 43% have been trained, 100% had guidline and form risk factor monitoring, 100% had promotion media. From 19 cadre, 52,6% graduated from senior high school, 100% is cadre of other programs, 53% had guideline book, 95% had work ≥2years, 90% don't have promotion meida. Operational funding of posbindu by independent participants. Process; 71% program manager had done the planning, but 0% who planned coverage targets. 84% implementation done routine, average number participants permonth is 11-20participant (53%) and 79% are remain. 63% cadres can do blood checks. Output;range of coverage participant and risk factor are unknown, cadre and program manager can't calculate the coverage.Outcome;high level of NCD and rising number of death from 120(2014) to 147(2015) when posbindu have already run.

**Conclusions :** Lack of programs are funding, infrastructure, planning, processing data, monitoring and evaluation (monev),its made this program not maximal and difficult to implement. It needs a thorough socialization and review of resource requirements also money to make posbindu feasible to implement and maximum.

**Key words :** Evaluation program, posbindu, Salatiga

## **3 Evaluation of Iron Supplementation Program for Pregnant Women in Gunungkidul District-Yogyakarta Province, 2015**

Gaby G. Langi<sup>1</sup>, R. A. Ahmad<sup>1</sup>, S. Raharto<sup>2</sup> <sup>1</sup>Field Epidemiology Training Program, Gadjah Mada University, Indonesia <sup>2</sup>Gunungkidul Health Office, Yogyakarta, Indonesia

**Background:** The prevalence rate of anemia among pregnant women in Gunungkidul District had increasing from 14.97% in 2014 to 21.88% in 2015 and become a priority health problem. This study aimed to evaluate the iron supplementation program for Pregnant Women in Gunungkidul District 2015 based on indicators of input, process, output and outcome.

**Methods:** This was observational descriptive study involving 62 respondents from 30 Health Centers and Gunungkidul Health Office. Primary data obtained through checklist sheets, questionnaires and interviews and secondary data obtained from documents review and Health Office's reports. Analysis data compared all program indicators to the guidelines and targets.

**Results:** Input: there was qualified human resources (54.84% midwives and 40.32% nutritionist) who had worked for an average of 12.8 years, but some respondents (51.61%) had not been trained, no iron tablets supply in the Health Office at the end of 2015, 52,200 iron tablets were expired, and some Health Centers (50%) did not have a guidebook. Process: most respondents had given counseling (95%) but the implementation of iron supplementation for thirty days (Fe1) and ninety days (Fe3) were not in accordance with the guidelines. Output: the coverage of Fe1 (93.66%) and Fe3 (88.77%). Outcome: the prevalence of anemia among pregnant women in 2015 was 21.88%.

**Conclusions:** Input and process are good enough, output is good compared to the target of Gunungkidul Health Office, but outcome is not good for it is higher than the targets of both Local Government Medium-term

Development Plans (RPJMD) and Gunungkidul Health Office. The guidebooks should be distributed to all Health Centers and each institution is suggested for budgeting reserve funds to ensure the availability of iron tablets.

Keywords: Iron Supplementation Program, Pregnant Women, Evaluation

#### 4 **Analysis of Economic Burden Of Measles Outbreaks In East Java Province, 2015**

Nuryanto<sup>1</sup>, Hari Kusnanto<sup>2</sup>, Yodi Mahendradatta<sup>3</sup> 1 Port Health Office of Pangkalpinang 2 Field Epidemiology Training Program Faculty of Medicine -UGM 3 Policy and Management of Health Services Faculty of Medicine - UGM

**Background :** The costs associated with measles outbreak overlooked. Low and middle-income countries health resources as well as poor households face significant challenges in coping with measles outbreaks because of high economic costs this can place on their meagre resources. The Objective of this study was to estimate the economic impact of a measles outbreak and response activities that occurred in East Java Province, using the health sector and household perspectives.

**Methods :** We collected cost input data through interviews and record reviews with government and through a survey of 151 measles cases-patients and their caretakers. Data analysis involved estimation of both direct and indirect costs of the following outbreak and response activities: investigation, outbreak response immunization, laboratory tests, Health promotion, case management and treatment.

**Results :** The economic cost of the outbreak and response was US\$ 28,620 (US\$ 189.5/case), including the direct cost of US\$ 18,317 (US\$ 121.3/case) and indirect cost of US\$ 10,302 (US\$ 68.2/case). Health sector costs, including the outbreak response immunization, accounted for 30.15% of the economic cost. Household economic cost was US\$ 4,770.72 including the direct cost of US\$ 1,349.5. Household economic cost, equaled 7.2% of the median annual household income.

**Conclusion :** The high economic burden in low income households could potentially reduce the resources available for essential basic needs. Improvement vaccination coverage above 95% would both reduce measles incidence and save considerable outbreak associated costs to both households.

**Keyword :** Economic burden, Outbreak, Measles, Health Sector, Household

#### 5 **Blood Pressure Control is Associated with Adherence to Antihypertensive Medication and Sleep Quality In Salatiga City, Central Java Province, Indonesia, 2015**

Authors: Prima.K.Hamzah, H.Kusnanto, B.Djarwoto Institutional Affiliations: University of Gadjah Mada, Salatiga's City Health Office

**Background:** Uncontrolled high blood pressure increases the risk of heart attack, stroke, kidney disorders. Adherence to antihypertensive medication is essential to control blood pressure among patients with essential hypertension. This study examined the associated between the control of high blood pressure with adherence to antihypertensive medication and sleep quality as a marker of general physical and mental health.

**Method:** This is a cross-sectional study, including 250 consecutive essential hypertensive patients visiting the outpatient clinics of a public health centre in Salatiga. The Pittsburgh Sleep Quality Index (PSQI), Mowrisky-8 (M-8) were administered to all subjects. Controlled blood pressure was defined as systolic blood pressure <140 mm Hg and diastolic blood pressure <90 mm Hg. High adherence to antihypertensive medication was defined as M-8 > 6, good sleep quality as PSQI <5. Patients with major risk factors for secondary hypertension and using sedative medication were excluded. Stata 12 and Microsoft Excel were used to perform data entry and analysis. Data analysis used robust poisson regression.

**Result :** The prevalence of controlled blood pressure was 32,8%. There was 30,4% among subjects reported good adherence to antihypertensive medication, and 23,2% reported having good sleep quality. Controlled blood pressure was significantly associated with good adherence to antihypertensive medication [PR=1,36,(95%CI;(1,08-1,72))] and good sleep quality [PR=1,30; 95%CI;(1,01-1,68)]. Demographic and physical characteristics (age, sex, body mass index) and life style (coffee drinking, smoking and exercise) were not associated with controlled blood pressure.

Conclusion: Blood pressure control is not only associated with adherence to antihypertensive medication, but also sleep quality. Therefore, we recommend changing lifestyle, consuming antihypertensive regularly, monitoring blood pressure and repairing sleep quality can control blood pressure.

Keywords : Blood pressure control, adherence antihypertensive, sleep quality.

**Oral presentation 10**  
FRIDAY, 9 OCTOBER 2016/13.00-14.00

| <b>SESSION 10 : BALLROOM</b><br><b>VECTOR BORNE AND CHRONIC DISEASE</b> |
|---|
| Aena Mardiah  |
| Evy Wisudariani   |
| Hasirun   |
| M. Syairaji   |

## SESSION 10

### TOPIC: VECTOR BORNE DISEASE

1. Distribution Patterns and Risk Factors of The Incidence of Dengue Haemorrhagic Fever (DHF) In The Subdistrict of South Purwokerto Banyumas District  
Aena Mardiah<sup>1</sup>, Tri Baskoro Tunggul Satoto<sup>2</sup>, Dibyo Pramono<sup>3</sup>

Background: Dengue haemorrhagic fever (DHF) is still one of public health problems in Banyumas, it increase fluctuatively. There are 35 villages that reported in several subdistricts scattered as endemic region. Various control measures have been carried out by the District Health Department of Banyumas, however dengue cases are still appear in recently years. DHF is caused by an imbalance of three interacting factors those are host factors, agent, and environment. The use of Geographical Information Systems (GIS) determine the spatial distribution or the distribution patterns related to with habitat vector. The aims of this study is to determine the distribution patterns and risk factors that affect to incidence of Dengue Haemorrhagic Fever (DHF) in the subdistrict of South Purwokerto.

Method: This study is observational with case control design. The case group was patients with DHF. Control group was not the DHF patients. The sampling technique was consecutive, which were 138 cases and 138 control patients. This study examined the variable that included: the dependent variable is dengue cases, the independent variable is the factors of host, behavioral factors, larva free number, type of home, and distance index. Statistical analysis used Chi-square, Fisher (bivariate analysis) and Logistic Regression (multivariate analysis).

Result: Bivariate analysis showed that risk factor of habit of hanging clothes, traveling to endemic areas, using mosquito repellent, PSN habits, and the kind of house are related to the incidence of dengue. Multivariate analysis showed that the risk factors that contribute to the incidence of dengue are hanging clothes, traveling to endemic areas, and the habit of PSN. The cases patterns of distribution are clustered at Tanjung and Karang Pucung village.

Conclusion: The incidence of Dengue Hemoragge Fever increase in people who have a habit of hanging clothes, traveling to endemic areas, and have PSN habits. The cases distribution is clustered in Tanjung and Karang Pucung village.

Keyword: DHF, Distribution Patterns, Banyumas District.

**2. Outbreak of Malaria in Banjarnegara District, Java Province – Indonesia, 2015**

**Evy Wisudariani<sup>1</sup>, E.W. Sihite<sup>1</sup>, T.A.Wibowo<sup>1</sup>, E.C.Prasetyaningsih<sup>2</sup>**

**1. Field Epidemiology Training Program (FETP), Gadjah Mada University, Yogyakarta 2. Hj. Anna Lesmanah Hospital, Banjarnegara, Java Province**

**Background:** In September 2015, the event based surveillance and response captured increasing Malaria in Paseh Village, Java Province at week 37 were reported as many as 15 new cases Malaria. The objective of this research to verify the existence of an outbreak, to determine the magnitude, source of infection and malaria transmission.

**Methods:** We conducted 1:2 case control study in September 2015. A case was positive laboratory results (rapid diagnostic test and microscopic). Control is people who lived in the same house or neighbour of the case with negative RDT and microscopic test. Socio-demography data and risk factors were collected using structured questionnaires. Multivariate logistic regression models were used to identify associated factors.

**Results:** We identified 32 cases, 56,25% were male. The most affected age group was the 15-44 years with an attack rate of 12.44%. There is no dead case. Around the house of respondents were found bark garden/Zalacca palm garden and river. The most common symptoms were fever (100%), chills (81.25%) and sweats (78.12%). Multivariate analysis showed that respondents in the case have the habit of going out at the night (OR= 2.98; 95% CI= 1.13-7.84), the existence of cattle sheds (OR= 3.09; 95% CI= 1.04-9.18), the presence of mosquito breeding sides (OR= 3.62; 95% CI= 1.29-10.15) had significant association with malaria incident. Laboratory examination of blood samples confirmed that three out of 32 cases were positive p.falciparum sexual phase (gametocytes).

**Conclusion:** Outbreak of malaria was confirmed. A propagated malaria outbreak was established in Paseh Banjarnegara from week 35 too week 45, 2015. Recommendation for Banjarnegara District Health Officer to intensify active case finding, strengthen surveillance systems and malaria prevention.

**Keywords:** Malaria, outbreak investigation, falciparum, Banjarnegara.

**3. Forecasting Dengue Haemorrhagic Fever Cases Using Arima Model in East Java Province – Indonesia, 2015**

**Hasirun<sup>1</sup>, Atik Choirul Hidajah<sup>2</sup>, Windhu Purnomo<sup>3</sup>, Avie Sri Harivianti<sup>4</sup>**

**1Student of Field Epidemiology Training Program, Airlangga University 2Department of Epidemiology, Airlangga University 3Departement of Biostatistics, Airlangga University 4East Java Health Office 1 e-mail: run\_fetp@yahoo.co.id**

**Background:** Dengue incidence continues to increase dramatically worldwide in the past decade. Indonesia is one of countries with highest dengue cases. Trend of dengue cases in Indonesia in 2002-2014 showed that the highest incidence rate of dengue fever occurs in 2007 with 71,78 cases per 100,000. One of the provinces with the highest dengue cases namely East Java. The objective of this study was to determine the model and the major forecasting dengue fever cases in East Java province for a period of one year in 2015.

**Methods:** This research was conducted using secondary data. Data collected used study of documentation. The data were the number of dengue cases in the province of East Java in 2005 to 2014. The units of analysis in this research were 120 months. Data analysis used time series with Minitab applications that aimed to forecast dengue cases in the province of East Java.

**Results:** Forecasting results obtained ARIMA (0,1,1) (1,1,1)<sub>12</sub>. The model was the best model from several possible models that existed because it was only model that had a significant parameter, white noise and met the assumption of independence. The results could be interpreted that the large number of dengue fever patients in January 2015 which was about 3072 cases and the lowest was in September about 589 cases. It was also found Mean absolute error about 403,74 cases using this model.

**Conclusion:** this forecasting model can be used to forecast the number of cases. Forecasting by comparing with other variables is suggested.

**Keywords:** dengue, forecast, arima, model

**4. Increasing *Aedes aegypti* Resistance and Risk Factors for Dengue Haemorrhagic Fever – Purwokerto City, Indonesia, 2014**

**Muhammad Syairaji<sup>1</sup>, T. Baskoro Tunggul Satoto<sup>2</sup>, D. Pramono, <sup>3</sup>**

**FETP University of Gadjah mada, Yogyakarta, Indonesia**

**Faculty of Medicine University of Gadjah Mada, Yogyakarta, Indonesia**

**Faculty of Dentistry University of Gadjah Mada, Yogyakarta, Indonesia**

**Background:** Banyumas District is one of dengue-endemic area in Central Java, Indonesia. The incidence rate for Dengue Haemorrhagic Fever (DHF) in the district increased from 12.61 in 2012 to 32.14 in 2013, where 50% cases occurred in Purwokerto City. The objective of this study is to assess the relationship between knowledge of dengue, attitudes towards control, practice towards prevention, larvae presence, maya index, and *Aedes aegypti* (*A. aegypti*) resistance to malathion in Purwokerto, Indonesia, in 2014.

**Methods:** A 1:1 case-control study was conducted in September 2014. Cases were the heads of 100 households with one or more family members infected with DHF (WHO's classification) in 2013 and 2014, living in Purwokerto. Controls were heads of 100 households without DHF but living within a 400m radius from cases. Participants were chosen by stratified random sampling and interviewed by structured questionnaire and standard check list. Malathion resistance testing used WHO's standard susceptibility test. Data analysis involved logistic regression.

**Result:** Most participant demonstrated high knowledge of dengue (60%), moderate attitude towards control (84%), and high practice towards prevention (90%). Significant multivariate results included larvae presence (Adjusted-Odds Ratio (AOR)=2.35; 95% Confident Interval (CI)=0.55-10.01) and high maya index (AOR=2.14; 95% CI=1.13-4.24). 23% of mosquitoes died during malathion resistance testing.

**Conclusion:** This study demonstrates that *A. aegypti* are resistant to malathion in Purwokerto, Indonesia. High maya index is associated with DHF incidence. However, there was no evidence of a relationship between knowledge, attitudes, practices, larvae existence, and moderate maya index DHF incidence. To district health office expected to no longer use malathion as insecticides for fogging and more monitoring based on community to routinely control water containers.

**Key Words:** dengue haemorrhagic fever, risk factors, *Aedes aegypti*, malathion resistance, Banyumas.

**Oral presentation 11**  
FRIDAY, 9 OCTOBER 2016/15.45-17.00

| <b>SESSION 11 : BALLROOM</b>                                 |
|--|
| <b>VECTOR BORNE, RESPIRATORY AND NON INFECTIOUS DISEASES</b> |
| Mulia Sugiarti   |
| Rensat Bastian Tino  |
| Desy Ari Apsari  |
| Farrah Fahdhienie  |
| Rajunitrigo  |

## **SESSION 11**

### **TOPIC: VECTOR BORNE, RESPIRATORY AND NON INFECTIOUS DISEASES**

#### **1. Laboratory-Based Surveillance Of Dengue In The District Of Tangerang, Banten, Februari – April 2016**

Mulia Sugiarti, D.Retnosari, Marisa, and E.Kusumowardani<sup>1</sup>

**Background.** In early 2016, tangerang distric was declared dengue outbreak. Until 4th February 2016, there were 372 confirmed cases of dengue with 15 deaths (CFR 4%). Because of that, BBTKL PP Jakarta and public health office Tangerang did Laboratory-based surveillance of dengue at five health center services on Mach – April 2016.

**The Methods.** This study did serology test at Blood suspected dengue, larva and vector-borne dengue with PCR methode, larva survey to calculated House Index (HI) , resistant test for insecticide and larvicide with WHO standard, and Population at risk survey at 150 houses used cross sectional method.

**Results.** The blood serology results are DEN2 (46 samples), DEN3 (18 samples), DEN1 (6 samples) and DEN4 (3 samples). It also find mix infection, there are DEN2&3 (7 samples), DEN2&DEN4 (2 samples), and DEN3&DEN4 (1 sample). The serology test at vector transmission found DEN4 from 2 micro tube samples female Aedes aegypti and DEN2,DEN3,&DEN4 from 2 micro tube samples female Aedes aegypti. HI result showed that 25,6% (HI<5%, WHO). The insecticide-resistant test showed mosquito Aedes aegypti have been resistant with Alphacypermetrin 0.025% and Malathion 0.8%. Larvicides Test result is larvae still susceptible with temapos (0.02 ppm). Population at risk survey showed 76 respondent have low level knowledge about dengue and 74,7% have low level behavior about eradicate breeding place vector.

**Conclusion** DEN2 infection has severe clinical symptoms and high risk cause death, so Tangerang District Health Office needs to improve the Procedure of Handling Case Findings dengue patients. Eradication vector breeding place still more effective with improvement knowledge and behavior about dengue, and using larvicide (Temapos 0,02 ppm) than using insecticide.

**Keyword :** Arbovirosis, Dengue, Serology Test, Disease Vectors,

#### **2. The Risk of Environmental Factors on The Occurence of Malaria**

Authors : Rensat B. Tino, A.C. Hidajah , S. Martini, C. U.Wahyuni,  
FETP Universitas Airlangga Surabaya

**Background:** The prevalence of malaria in pregnant women in Timor Tengah Selatan (TTS) District was fluctuated in the period 2011-2015. The highest prevalence in 2015 was 4.5% (73 cases) and the lowest was 2.73% (100

cases) in 2014. Malaria in pregnant woman may increase maternal and infant mortality. In TTS district Malaria was the third highest causes of maternal mortality in 2014. The objective of the study was to analyze the risk of environmental factors to the incidence of malaria in pregnant women.

Methods: This was a case-control study. Pregnant women who did the ANC in health centers and suffer malaria based on laboratory examination in 2015 were the cases population, while the pregnant women who not suffer malaria were the control group. Sample size was 90, that were taken from the population using multi-stage sampling method. The independent variables density of the house's walls, the presence of the house's ceiling, the presence of the cattle pens and the breeding places around the house. Data were analyzed using chi-square ( $\alpha=0,05$ ) and count the Odds Ratio.

Results: The results showed that the density of the walls and the presence of breeding places around houses were the risk factor of malaria in pregnancy. Pregnant women who have not the dense wall of the house had a 3 times greater risk for malaria infection ( $p=0.010$ , OR 3.619). And pregnant women who had a house close to the breeding places had a risk four times higher ( $p=0.001$ , OR: 4.375). Conclusion: Risk factors of malaria in pregnant women in the district of TTS is the density of the walls and the existence of breeding places around the house.

Key words: Malaria in pregnancy, environmental factor, Timor Tengah Selatan Districtin pregnancy in Timor Tengah Selatan District, East Nusa Tenggara Province 2015

### **3. Determinants Tuberculosis in Delitua Districs Deli Serdang - 2013**

Desy Ari Apsari Department of Environmental Health

Background: The number of people with tuberculosis in Deli Serdang including the highest compared with districts / cities in North Sumatra Province. Subdistrict Delitua border city of Medan. Tuberculosis detection rate of new cases in the District Delitua found 83 cases of BTA (+). The purpose of this study to determine the risk factors for transmission of tuberculosis in the District Delitua.

Methods : Observational study with case control study design using a ratio of 1: 1 to 114 study subjects. Cases were patients diagnosed with tuberculosis by doctors include sputum smear examination results (+) in the laboratory. Purposive sampling method. Data were analyzed using chi-square and logistic regression at 95% confidence level.

Results : Analysis showed that 66.67% of cases aged is over 35 years, 57.89% are women, 77.27% are domestic workers daily. The results of logistic regression analysis identified risk factors Tuberculosis is a job (OR = 7.37, 95% CI; 2.23 to 24.33), immunization status (OR = 3.27, 95% CI: 1.37 to 7.80 ) and contact history (OR = 5.44, 95% CI: 1.70 to 17.36), the probability of exposure to risk factors of 96.7%.

Conclusion: The work as domestic workers daily and history of contact with the sufferer becomes a dominant factor in the incidence of tuberculosis Delitua. Suggestions put forward are screening people who have symptoms and socialization for family members household contact with tuberculosis patients BTA (+) tuberculosis patients BTA ( + ) and ssearch potential transmission through a public vehicle to raise awareness of the risk of transmission of tuberculosis.

Keywords: tuberculosis, determinan, domestic worker

### **4. Risk Factors of Pulmonary Tuberculosis in Babahrot Public Health Center, Southwest Aceh District, Indonesia, 2016**

Farrah Fahdhienie

Background: Pulmonary Tuberculosis (TB) causes health problems of millions people annually. It is in the second ranks of the leading cause of death of infectious diseases. TB is a contagious and serious disease to that should be the prevention and treatment. In 2015, the prevalence rate of TB in Babahrot Public Health Center (PHC) was 14.8%, it made the PHC as the highest prevalence of TB in Southwest Aceh District. An epidemiological study was conducted to determine the risk factor of TB in Babahrot PHC, Southwest Aceh District, Aceh, April 2016.

Method: This was an observational study with case control design. A confirmed case was a case that meets the clinical case definition and laboratory confirmed. Controls were neighbors of cases matched for age, work, and

history of diabetes. Data collected by using structured questionnaire. The study used bivariate and multivariate analyses with chi-square and logistic regression. Odds ratio (OR) was used to determine risk factors.

Result: We interviewed 35 cases and 35 controls. The bivariate analysis showed that household contacts (OR: 10 95% CI: 3.3-30.2), sex (OR: 9.3 95% CI: 3.0-28.5), the level of knowledge (OR: 2.9 95% CI: 1.1-7.7) were the risk factors. The multivariate analysis showed that household contacts (OR: 18.8 95% CI: 4.1-86.6) and sex (OR: 12.1 95% CI: 2.7-53.7).

Conclusion: The risk factors were household contacts and sex. We recommend the Babahrot Public Health Center to conduct health promotion, active case finding, screening, and better targeting of surveillance.

Keywords: Pulmonary Tuberculosis (TB), case control design, matching, household contact, sex

#### **5. Risk Factors Outbreak of Measles at Sukaresmi Village, Bandung District, 2016**

Authors: Rajunitrigo<sup>1</sup>, D. Gayatri<sup>2</sup>, and Rusli<sup>3</sup> 1. Field Epidemiology Training Program (FETP), Universitas Indonesia. 2. Public Health Faculty of Universitas Indonesia. 3. FETP Supervisor, West Java Provincial Health Office.

Background: Measles is a highly contagious disease and one of immunization preventable diseases. Indonesia's target was to eliminate measles on 2015. On 16 February of 2016, we received information on 8 suspected measles cases and 7 positively diagnosed (IgM) measles cases at Sukaresmi Village which was reported by Rancabali Primary Health Centre to Bandung District Health Office. We then investigated the outbreak at Sukaresmi Village to confirm and identify the risk factors.

Method: The study was done using case control design (comparison 1: 2). Cases were all people with fever and rash, and/or cough, cold, conjunctivitis with onset of disease from mid- December 2015 to mid-March 2016. Controls were neighbors of cases but those without measles symptoms and had not gotten illness with symptoms similar to measles. Data were collected by interviewing participants and by observation.

Result: We interviewed 20 cases and 40 controls. The main symptoms of cases were fever (100%), rash (100%), cough (100%), cold (100%), conjunctivitis (95%), diarrhea (35%) and koplik spot (5%). The highest attack rate were among teenagers aged 15-19 years old (5.29%). Peak of cases occurred on third week with 7 cases. The multivariate analysis showed that lack of immunization (OR: 4.34, 95% CI: 1.53-7.14), contact with measles cases (OR: 3.37, 95% CI: 0.38-6.36), and under-nutrition (OR: 3.53, 95% CI: 0.7-6.35) were the risk factors. We also observed that herd immunity at Rancabali Primary Health Centre area was 65% (less of 95%) on last three years.

Conclusion: Three risk factors measles outbreak were lack immunization, contact with measles cases, and under-nutrition. We recommend to strengthen the surveillance cases based on laboratory, routine immunization of second doses, health promotion, and improvement of public nutrition.

Keywords: Measles, Outbreak, Risk Factors

# **POSTER PRESENTATIONS**

### ***LIST OF POSTER PRESENTATIONS***

| <b>Code</b> | <b>Name</b>                    | <b>Topic</b>                            |
|-------------|--------------------------------|---|
| S073        | Evyy Wisudariani               | Chronic Disease And Health Promotion    |
| S007        | Merlyn Sinaga                  | Chronic Disease And Health Promotion    |
| S038        | Andi Dian Puji Lestari         | Evaluation of Surveillance System       |
| S064        | Melyana                        | Evaluation of Surveillance System       |
| S001        | Shinta Sumiarsih               | Evaluation of Surveillance System       |
| S048        | WARDIANSYAH NAIM               | Evaluation of Surveillance System       |
| S054        | ARINA MUFIDA ERSANTI           | Food and water borne disease            |
| S052        | Nasir Ahmad                    | Food and water borne disease            |
| S043        | Slamet Riyadi                  | Food and water borne disease            |
| S029        | Ane Dayu Perwati               | Health Problem Analysis                 |
| S042        | Marwanty                       | Health Problem Analysis                 |
| S063        | Melyana                        | Health Problem Analysis                 |
| S025        | Nuratul Awaliyah               | Health Problem Analysis                 |
| S028        | Windalia Apriani Fitri         | Health Problem Analysis                 |
| S002        | Stefanie Juergens              | HIV-STI                                 |
| S079        | Defryana Rakebsa               | Maternal, Child And Reproductive Health |
| S023        | Namira Wadjir Sangadji         | Maternal, Child And Reproductive Health |
| S068        | Aning Isfandyari               | Other                                   |
| S050        | Rosalia Kurniawati             | Other                                   |
| S076        | Totok Sutianto                 | Other (nosocomial, NTD, etc)            |
| S034        | Rimawati Aulia Insani Sadarang | Program Evaluation                      |
| S084        | Dian Kurnia Rabbani            | Surveillance system                     |
| S005        | Eti Setiati                    | Surveillance system                     |
| S082        | Selvi Pratiwi                  | Surveillance system                     |
| S083        | Sri Sahayati                   | Surveillance system                     |

# ABSTRACTS:

| No | Name                   | Abstract  |
|----|------------------------|---|
| 1  | Andi Dian Puji Lestari | <p>Significant Improvements Needed for Malaria Surveillance System – Kulon Progo, Yogyakarta Province, Indonesia, 2014<br/>Andi Dian Puji Lestari<sup>1</sup>, BertyMurtiningsih<sup>1</sup>,Sugiarto<sup>2</sup></p> <p>Background: Kulon Progo is the only district in Yogyakarta Province, Indonesia, currently without a malaria elimination certificate. This can be obtained after evidence of no indigenous case for at least three years consecutively. An effective surveillance system is therefore necessary. The purpose of this study was to evaluate the malaria surveillance system in Kulon Progo in 2014.</p> <p>Methods:The 21 surveillance officers working in the KulonProgo District were interviewed by questionnaire and in-depth interview. Data collection also involved the study of documentation. The surveillance system was evaluated in the context of human resources, data analysis and outputs, including timeliness of reporting.</p> <p>Results:Surveillance officers were predominantly nurses (48%) and sanitarians (14%), 81% had <sup>3</sup>3 program responsibilities and no participants had received surveillance-specific training within the past five years. 86% participants did not understand application of case definitions for case-classification and 92% could not interpret data. Timeliness of monthly reporting was 68% and delays to case notification was problematic. Case reporting from the other health services and hospitals was often received only after 1-3 weeks. Private practices were not involved in SKD (early warning system) and cross notification activities. Supervision was never conducted.</p> <p>Conclusions: The malaria surveillance system in Kulon Progo performs poorly in many areas, including prompt notification, investigation, case-classification, and supervision. Training of surveillance officers is essential, particularly in the application of case definition for case-classification, data analysis and interpretation. The district health office should supervise the surveillance officer performance and evaluate the timeliness and coordination of communication between CHCs, hospitals and DHO. Collaboration and capacity building is needed to improve case detection. Community engagement should also be enhanced to improve early detection.</p> <p>Keyword:evaluation,surveillance system,malaria,Kulon Progro.<br/>1. Field Epidemiology Training Program, Faculty of Medicine Gadjah Mada University 2. District Health Office of Kulon Progo, Yogyakarta Province, Indonesia</p> |

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| 2 | Ane Dayu Perwati | <p>Priority Health Problems in The District Wonogiri, Central Java, 2015<br/>Ane D. Perwati<sup>1</sup>, S. Nurjannah<sup>1</sup>, S. Heriyanto<sup>2</sup>, T.A Wibowo<sup>1</sup><br/>1. Field Epidemiology Training Programs (FETP), Gadjah Mada University 2. The District Health Office Wonogiri</p> <p>Background:, Wonogiri is a mountainous area with a poverty rate of 13.09%, dependency ratio of 51%, and a low ratio of health workers (3.2 per 100,000 population). Proper planning is essential in tackling existing health problems. Therefore, analysis of health problems is an important step to initiate the process of planning. This study aimed to describe, analyze, and determine the priority health problems in Wonogiri District.</p> <p>Methods: This was descriptive study, by analyzing report data of morbidity and mortality of health problems, the targets, coverage, and achievement of health program in Wonogiri District Health Office. Hanlon method was used to determine and prioritize problems. Hanlon Score was reached by using questionnaires given to 16 structural officers, based on the following criteria: the magnitude of problem, emergency, the effectiveness of intervention, as well as propriatness, economic feasibility, acceptability, resource availability, and legality (PEARL factor).</p> <p>Results: There were nine health problems in Wonogiri in 2015. Hanlon Score ranged between 40.62 to 53.1 with details from highest to lowest were maternal mortality rate with scores (53.1), dengue hemorrhagic fever (score 51.5), HIV/AIDS (score 49.5), under five mortality rate (score 48.78), infant mortality rate (score 48.25), tuberculosis (score 46.25), hypertension (score 41.48), diabetes mellitus (score 41.44), and pneumonia (score 40.62 ).</p> <p>Conclusion: The top three of priority health problems in wonogiri are maternal mortality rate, Dengue Haemorrhagic Fever (DHF) and HIV/AIDS. Wonogiri health office should design a program with comprehensive planning related to those priority problems.</p> <p>Keywords: planning, analysis of health problems, hanlon methods , Wonogiri District.</p> |
| 3 | ANING ISFANDYARI | <p>Priority Health Issues in The Poorest District in Yogyakarta Province, Indonesia 2012-2015<br/>Aning Isfandyari<sup>1</sup>, G.G. Langi<sup>1</sup>, R.A. Ahmad<sup>1</sup>, S. Raharto<sup>2</sup><br/>1 Field Epidemiology Training Program, Gadjah Mada University, Indonesia 2 Health Office of Gunung Kidul District, Yogyakarta, Indonesia</p> <p>Background : Gunung Kidul is the largest district with highest poverty and lowest Human Development Index (HDI) in Yogyakarta. Limited resources lead to unresolved complex health issues, whereas focus of prevention can not be</p>  |

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|   |                      | <p>executed to all health issues. This study was to identify priority health problem in Gunungkidul District.</p> <p>Methods: It was a descriptive study. Secondary data was used from 2012 to 2015. Priority health problems were determined using Hanlon quantitative method by giving score to each criteria of magnitude of the problem, level of seriousness, level of intervention effectiveness and PEARL factor. Total score was the composite score of all criteria. Scoring was performed by District Health Office (DHO) Team consisting of 19 people.</p> <p>Results: Secondary data analysis showed that there were 15 major health problems in Gunungkidul district. Based on Hanlon priority approach, DHO team identified highest to lowest score were Tuberculosis (148,07), HIV/AIDS (142,38), DHF (142,16), Maternal Mortality Rate/MMR (133,85), Anemia in pregnancy (124,06), Low Birth Weight/LBW (123,34), Child Mortality Rate(122,98), Stunting(115,70), Diarrhea(112,94), Pneumonia(108,41), Diabetes Mellitus(106,59), Hypertension(104,68), 4th Antenatal Care (100,65), exclusive breastfeeding(93,18) and Leprosy(0,00). Considering the limited resources and finance, DHO team decided to develop planning in 2016 that focus on the three priority.</p> <p>Conclusion: The Three priority of health problems in Gunungkidul are Tuberculosis, HIV/AIDS, and DHF. Hanlon method is useful to DHO to identify priority health issues. DHO should perform further identification related to the factor contributing to those priority problems.</p> <p>Keywords: Health Issues, Gunungkidul District, Hanlon Method</p> |
| 4 | ARINA MUFIDA ERSANTI | <p>Identification Determinant Of Food Poisoning In Tegalrejo Village Tempursari Sub District Lumajang District - East Java, 2015<br/>Arina M. Ersanti , A.Nugroho and A.Hidajah Author's email address : arina.mufida@gmail.com</p> <p>Background : Food poisoning is illness caused by eating contaminated food. Sometimes, food poisoning it can occurred outbreak. In this study determination made after 20 Tegalrejo residents came to the health center of Tempursari with the same symptoms in less than 6 hours after consuming food that comes from the 40-day event newborns. This study aims to identify the agent that caused an outbreak of food poisoning that occurred in Tegalrejo Lumajang on 25 April 2015</p> <p>Methods : Outbreak investigations conducted by case-control study. Total cases of poisoning symptoms as many as 64 people. Control was taken by people whom consumed food at home or when presented as many as 35 people. Identify cause by counting Attack Rate on the food that consumed in case and control group. Determination analyze of bacteria types based on the incubation period and strengthened by the results</p>  |

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|   |                  | <p>of laboratory tests by the Center for Health Laboratory Surabaya.</p> <p>Results : The food served were sweet tea while the take-away food were rice, chicken, noodles, fried sauce, lodeh, urapan, egg, botokan, and iwel-iwel. At 19:00 pm on the same day, some residents began to come to the nearest health facility with symptoms of nausea, vomiting, diarrhea, dizziness, and heartburn. The most suspect food was iwel-iwel (AR = 30.3%). The incubation period of this food poisoning shortest was 30 minutes, while the longest 35.5 hours. The incubation period in accordance with the characteristics of E.coli were confirmed by laboratory results.</p> <p>Conclusions : Food poisoning in Lumajang caused by E. coli bacteria. Source of infection was iwel – iwel</p> <p>Keyword : Food Poisoning, E.coli, Lumajang</p>   |
| 5 | Defryana Rakebsa | <p>PREGNANT WOMEN MENTORING BY CADRES IN YOGYAKARTA, 2015 : A PROGRAM EVALUATION<br/>Defryana Rakebsa, C. Indriani<sup>1</sup>, Susilawati<sup>2</sup><br/>1.Field Epidemiology and Training Program (FETP) Gadjah Mada University 2. Yogyakarta District Health Office</p> <p>Background: Since 2006 government of Yogyakarta have carried pregnant women mentoring by cadres program intensively to monitor all of the pregnant women health status in Yogyakarta. This program supported with representative condition of health facilities. However, the number of maternal mortality remains high in Yogyakarta. In addition, during the implementation of this program, an evaluation activity was never conducted. Therefore, this study was necessary to evaluate the effectiveness of this program.</p> <p>Methods: A descriptive observational study was conducted in December 2014 . 18 midwives at health center as coordinator of the program were interviewed by structured questionnaire, 5 cadres and 5 postpartum mothers were interviewed by questionnaire with open-ended question.</p> <p>Results: Planning activities for the program were conducted by District Health Office and the midwives coordinator however the cadres were not involved. In the implementation process of the program multi-sectorial were involved, multi-sectorial meeting conducted twice a year. The mentoring activities conducting once a month started from the first pregnancy's visit until postpartum period. Neither guide book nor training provided for the cadres prior to mentoring activities. District health office conducting monitoring activities for the health center 3 to 4 times a year however there were none monitoring activities for the cadres.</p> |

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|   |                     | <p>Conclusion: For the pregnant women this program was very helpful since they were mentored by cadres constantly during the pregnancy. There are needs for program guide book and standard operating procedures for the coordinator program and the cadres. District health office needs to evaluate the program comprehensively in order to measure the effectiveness of this program in Yogyakarta.</p> <p>Keyword: Program Evaluation, Maternal Mortality, Maternal-Child Health Services</p>  |
| 6 | Dian Kurnia Rabbani | <p>The Innovation To Improve Founding Suspected TB By Making Partnership With “Cadres” (Health Volunteers) – (An Operational Research in TB’s Program)– Bogor, 2016<br/>Dian K. Rabbani, R. Hatma, E.Wulantari, N. Adnan</p> <p><b>Background</b> : Various strategies carried out to end TB. In order to measure the success of the TB’s program have made several indicators. One of the TB program indicator is CDR. CDR is influenced by three important components, to found suspected tuberculosis, an adequate physical and laboratory examination, and enforcement of proper diagnosis. To tackle the low CDR in Bogor district focused on found suspected tuberculosis. We do the research operational, by making innovation to found suspected tuberculosis by involving cadres.</p> <p><b>Method</b> : This is a descriptive study, to see the advantages of cadres involving to found suspected TB. Is this study could affect to increase discovery of suspected tuberculosis or not. Before that, need to increase knowledge and skills of cadres with micro teaching method. Discovery suspected tuberculosis by cadre will held in one village namely Bendungan. There are 12 cadres will help this intervention.</p> <p><b>Result</b> : Micro teaching quite effective to increase knowledge of cadres about TB. After one month of the implementation of the intervention found 11 suspected tuberculosis by cadres. The best thing that there are was found two people with suspected TB in one family, where already there are 2 people also died with lung disease in that family also, but this case untouched by health care facilities.</p> <p><b>Conclusion</b> : Reducing TB problem is not only a responsibility of the health sector. Involving relevant sectors such as the cadres and society can contribute positively to the TB’s program. Because cadres are people near with the population, and they are also know many thing in population.</p> <p><b>Kata Kunci:</b>Suspect TB, Cadres, partnership, founding</p> |
| 7 | Eti Setiati         | <p>Background : Polio eradication is a global commitment headed by the World Health Organization (WHO)and expected to be done by 2020. AFP surveillance is an integral component of this endeavor.s. Based on Minimum Service Standards Purworejo AFP case detection rate in 2014 amounted to 50.00% of the national target. The purpose of this study is to identify the weaknesses of the AFP surveillance system as well as opportunities for improvement.</p>  |

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|   |                  | <p>Method This study design was observational descriptive. Measuring instrument used was a structured questionnaire. respondents were the surveillance officers of the health centers and the district surveillance officer. Performance assessment was based on WHO indicators.</p> <p>Result Completeness of weekly reports for 31.25% of qualified health centers (&gt; 90%). The quality of the district surveillance completeness 55.88%. Data processing, analysis and interpretation has not been carried out. The accuracy can not be measured, since there is no time information reception reports from health centers. Double duty officer&gt; 3 was 18.75%, officers have not been trained AFP surveillance, W1 form was 18.75%, FP1 form was 25.00%, communication equipment and computers was 100%, the level of education DIII 62.50% , AFP surveillance hospital has not been implemented.</p> <p>Conclusion Hospital surveillance network does not work. Analysis and interpretation of the data has not been done in the clinic and DHO. Completeness not reached the target. Indicators invention AFP cases have not yet reached the target. The AFP surveillance system needs to be revitalized through updated and upgraded training of concerned personnel.</p> <p>Keyword :Surveillance, System, AFP, Polio</p> |
| 8 | Evvy Wisudariani | <p>Risk Factors of Diabetes Mellitus Type II at Banjarnegara Public Health Center, JavaProvince, Indonesia, 2015<br/>Authors : Evvy Wisudariani<sup>1</sup>, T.A.Wibowo<sup>1</sup>, E.C.Prasetyaningsih<sup>2</sup><br/>1. Field Epidemiology Training Program (FETP), Gadjah Mada University, Yogyakarta<sup>2</sup>. Hj. Anna Lesmanah Hospital, Banjarnegara, Java Province</p> <p>Background: The prevalence in Java Province was 1.5% in 2013. In Banjarnegara, there is increase numbers Diabetes Mellitus. The objective to determine the prevalence and risk factors of diabetes mellitus in Banjarnegara public health center.</p> <p>Methods: We conducted cross sectional study between September-November 2015 selected with consecutive sampling from Banjarnegara Public Health Center. All attendants aged more than 15 years were tested blood sugar to detect cases of Diabetes Mellitus. Samples size was 164 respondents. Data was collected using structured questionnaires. Bivariate and multivariate logistic regression models were used to identify associated factors. Stata 12 used for analysis.</p> <p>Results: . We identified 75 cases (prevalence 45.7%). The most affected age group was the more 60 years (51.22%) and</p>  |

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|   |          | <p>57,32% were female. Bivariate analysis results showed that habits of skipping breakfast (OR= 2.24; 95% CI= 1.16-4.36) and the abnormal of eating frequency (OR=2.08; 95% CI= 1.07-4.03) had significant association with diabetes mellitus type II. Multivariate analysis showed that age was a significant confounding factor in final model. Interaction analysis showed that respondents who had habits of skipping breakfast with abnormal of eating frequency had the risk of 4.6 times larger exposed diabetes mellitus.</p> <p>Conclusion: The dominant risk factors that contribute to diabetes mellitus type 2 is the habits of skipping breakfast at Banjarnegara Public Health Center. It is advisable for people to pay more attention to eating habits, especially, have a breakfast every day in order to maintain a healthy body.</p> <p>Keywords: Diabetes mellitus, skipping breakfast, Banjarnegara.</p>   |
| 9 | Marwanty | <p>Title: Potential disease of outbreaks in Indonesia 2012 – 2014<br/> Authors: Marwanty<sup>1</sup>, TM. Wahyono<sup>2</sup>, Abdurrahman<sup>3</sup> •<br/> Field Epidemiologi Training Program (FETP), Indonesia University • Public Health Faculty of Indonesia University •<br/> FETP Supervisor in Surveillance Subdirector of MoH RI</p> <p>Background: The disease outbreaks occurrence is already become a public health problem and a major concern in setting of public health policy in Indonesia. It can lead to the increasing of morbidity and mortality of some diseases. This study aims to determine the priority of highest potential infectious diseases outbreaks in Indonesia.</p> <p>Method : Study design was descriptive study which to assess the highest priority infectious diseases outbreak in Indonesia using secondary data from all outbreak reported to surveillance subdirector of MoH RI.</p> <p>Result : There were 13 outbreaks occurred in Indonesia in 2012 to 2014 of infectious diseases and food poisoning which are : Anthrax, Measles, Dengue Haemorrhagic Fever, Diphtheria, Avian Influenza, Hepatitis A, Leptospirosis, Malaria, Meningitis, Pertussis, Rabies and Food Poisoning. As result in this assessment five priority issues were obtained, which are Dengue Haemorrhagic Fever (83.16), Malaria (79.52), anthrax outbreaks (73.20), Food Poisoning (70.72) and Measles (66.96).</p> <p>Conclusion : The outbreaks of infectious diseases and food poisoning in Indonesia is still a major public health problem in Indonesia and there were some diseases with high priorities to be prevented. To reduce the occurrence of the outbreaks occurrence, it needs commitment and consistency of policies, support from various forms of cooperation, and active participation of the community in prevention, control and its mitigation.</p> |

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|    |         | Keywords: Outbreaks, food poisoning, infectious diseases   |
| 10 | Melyana | <p>Health Problem Analysis in Lamongan District 2015<br/>Melyana<sup>1</sup>, Sigunawan<sup>2</sup>, A. C. Hidajah<sup>3</sup><br/>1. Field Epidemiology Master Program Airlangga University 2<br/>Lamongan District Health Office 3 Department of Epidemiology<br/>Faculty of Public Health Airlangga University 1melyana-<br/>2015@fkm.unair.ac.id, 2sigunawan20@yahoo.com, 3atik-c-<br/>h@fkm.unair.ac.id</p> <p>Background: Health problem analysis is needed in order to plan the health problem solution program effectively and efficiently because there are limitations of resources in a district area. The stages of health problems analysis carried out following the Problem-solving Cycle.</p> <p>Methods: Health Problem Analysis in Lamongan District Health Office was conducted from December 21, 2015 - January 15, 2016. Health situation analysis and identification of health problems was done by reviewing secondary data obtained at the District Health Profile in 2012-2014 and primary data obtained through interviews. The type of data collected were health status data, aspects of demographic, behavioral health, the environment, and the data on morbidity and mortality. Selection of priority health problems is done through an assessment using the criteria of Urgency, Seriousness, Growth (USG) of each problem. Determination of root cause was done through the preparation of Ishikawa diagram using H.L. Blum theory for classifying the cause factor.</p> <p>Results: HIV/AIDS was the first priority health problem in Lamongan District. In 2015, there were 152 new cases of HIV, 22 AIDS related deaths, and 5 perinatal HIV in Lamongan. The Ishikawa diagram showed that low level of community knowledge about HIV/AIDS caused negative stigma in community was the root causes of HIV/AIDS case in Lamongan District.</p> <p>Conclusions: Improved dissemination to increase community understanding is a key point in solving the problem of HIV/AIDS in Lamongan District.</p> <p>Keywords: HIV/AIDS, health problem analysis, Lamongan</p> |
| 11 | Melyana | <p>EVALUATION OF PULMONARY TB SURVEILLANCE SYSTEM IN LAMONGAN DISTRICT 2016<br/>Melyana<sup>1</sup>, Sigunawan<sup>2</sup>, A. C. Hidajah<sup>3</sup> 1 Field Epidemiology Master Program Airlangga University 2 Lamongan District Health Office 3 Department of Epidemiology Faculty of Public Health Airlangga University 1melyana-2015@fkm.unair.ac.id, <a href="mailto:2sigunawan20@yahoo.com">2sigunawan20@yahoo.com</a>, <a href="mailto:3atik-c-h@fkm.unair.ac.id">3atik-c-h@fkm.unair.ac.id</a></p>  |

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|    |               | <p>ABSTRACT Background: Health Minister of the Republic of Indonesia Decision number 1116/MENKES/SK/VIII/2003, mentioned that one of the target diseases of epidemiological surveillance in Indonesia is Pulmonary TB. Based on the analysis of health problems that have been conducted in Lamongan District Health Office, Pulmonary TB is one of the priorities disease that needs preventive efforts.</p> <p>Methods: This study was conducted in Lamongan District on May-July 2016. Data were collected in the form of primary and secondary data. Secondary data such as TB surveillance report in Lamongan District Health Office, while the primary data were collected from interviews and document study with the pulmonary TB officer in health centers in Lamongan. From a total of 33 health centers in the working area of Lamongan District Health Office, 12 health centers were selected as sample by purposive sampling.</p> <p>Results: Of the 12 health centers that were selected as sample, 50% of pulmonary TB program officer has the highest education level as bachelor, 8 (66.7%) of pulmonary TB program officer have been served for <math>\geq 5</math> years. However, only 7 (58.3%) of pulmonary TB program officer has attended training on pulmonary TB. There are 4 (33,3%) of pulmonary TB program officer said that the surveillance were hard to conduct and 6 (50,0%) of pulmonary TB program officer who didn't have computer skills. Pulmonary TB surveillance is still done passively and there were delays in the reports collection.</p> <p>Conclusions: Evaluation of pulmonary TB surveillance system in Lamongan find problems on the attributes: simplicity, flexibility, sensitivity, timeliness, and stability.</p> <p>Keywords: Evaluation, Attributes, Surveillance, pulmonary tuberculosis</p> |
| 12 | Merlyn Sinaga | <p>Prevalence and factors associated with hardcore smoking among male daily smokers in Indonesia: Findings from the Global Adult Tobacco Survey 2011<br/> Authors: 1Merlyn Sinaga,2Yayi Suryo Prabandari<br/> 1Field Epidemiology Training Program, Gadjah Mada University 2 Center of Health Behavior and Promotion, Gadjah Mada University</p> <p>Background: Hardcore smoking defined as daily smoker with high nicotine dependence, weak quitting histories, and unwillingness to quit smoking. Little information was known about the prevalence and characteristics of this subgroup of smokers in Indonesia. This study examined the prevalence and factor associated with hardcore smoking among male daily smokers.</p> <p>Methods: Data was derived from Global Adult Tobacco Survey (GATS) Indonesia. GATS was a nationally representative</p>   |

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|    |                        | <p>household survey that conducted in 2011. Hardcore smokers had to meet 5 criteria: daily smoker who had been smoking for at least 5 years or longer, smoked <math>\geq 17</math> cigarettes per day, no quit attempt in the past 12 months of survey, no intention to quit in next 12 months or not interested in quitting and aged <math>\geq 26</math> years. Binary logistic regression was used to examine the association of socio-demographic and smoking related characteristics with hardcore smoking.</p> <p>Results: There were 6.2 million hardcore smokers in Indonesia. Prevalence of hardcore smokers among whole male population aged <math>\geq 26</math> years in Indonesia was 8.92%. These hardcore smokers constituted 14.14% of all male daily smokers. In multivariate analysis, being working as self-employed, living in rural area, starting smoking daily at 17 or younger, having their first cigarettes up to 30 minutes, and unaware of health consequences of smoking were statistically associated with higher risk of being hardcore smokers.</p> <p>Conclusion: High prevalence of hardcore smoker in Indonesia is a major public health challenge for non communicable diseases prevention. Smoking cessation services that cover the population of risk especially to the people who live in rural area and work as self-employed and education for avoiding start smoking at early age appeared to be the top priorities in Indonesia.</p> |
| 13 | Namira Wadjir Sangadji | <p>Evaluation Program of Exclusive Breastfeeding in Smallest City of Central Java 2015<br/>Namira Sangadji (1), A.Tresno (1), D.Woro (2) (1) Field Epidemiology Training Programs, Gadjah Mada University, Indonesia (2) Salatiga Health Office</p> <p>Background : Most infant deaths caused by infectious diseases. Giving colostrum and exclusive breastfeeding can prevent and minimize mortality in infants. Unfortunately, coverage of exclusive breastfeeding in Salatiga tend to be below the target over the years. In 2015, coverage of exclusive breastfeeding for 61.32% of the target of 67%. Dissemination of information about the importance of exclusive breastfeeding from health professionals is essential in increasing exclusive breastfeeding coverage. This study aims to determine the implementation of the program exclusive breastfeeding in Salatiga 2015.</p> <p>Methods : This research is a descriptive which was held on April to May, 2015. Problems identified using questionnaires and checklist sheets to all program managers at Health Centers and Health Office in Salatiga. The evaluation framework used are the aspect of input, process, output and outcome.</p> <p>Results : Input: Education from program manager D3 (83.3%), work more than 5 years (83.3%), double job (100%), trained (100%), not available guidebook (100%), available recording</p>   |

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|    |             | <p>and reporting form (100%), available funds (100%), transportation and computers available (100%). Process: planning (100%), monitoring and evaluation (100%), provision of information when ANC (100%), the performance of media health promotion (83%), the performance of breastfeeding counselor (33.3%), the performance of motivator breastfeeding (50%). Output: coverage of socialization exclusive breastfeeding (83%). Outcome: there is one health center that decreasing coverage exclusive breastfeeding in 2015.</p> <p>Conclusion : There are major problems in the program of exclusive breastfeeding that are no guidebook, double job, lack of promotion media about breastfeeding, weak role of counselor and motivator breastfeeding. Our recommendation is to optimize the performance of health professionals such as health promotion officers, counselor and motivator to improve the coverage of exclusive breastfeeding.</p> <p>Key Words : Exclusive Breastfeeding, Salatiga, Evaluation Program.</p>   |
| 14 | Nasir Ahmad | <p>Outbreak by "Calamari Like" Poisoning at Elementary School 1 Trasan, Magelang Regency, Indonesia 2016<br/>Nasir Ahmad<sup>1</sup>, S. Crishnaety<sup>1</sup>, Isworo Adi<sup>2</sup>, Indriani Citra <sup>1</sup><br/><sup>1</sup> Field Epidemiology Training Programs, Gadjah Mada University, Indonesia <sup>2</sup> Lecturers D-3 nursing, Polytechnic Health, Indonesian Ministry of Health</p> <p>Background: On May 4th, 2016, at 12:30 district surveillance officer of Magelang Health Department received reports from Public Health Center of Bandongan about 21 students of SDN 1 Trasan who suffered from the same food-poisoning symptoms. Investigation was carried out to identify the source, how it spread and how to control it.</p> <p>Method: This study used nested case control study and mapping the cases distribution location. The case was people experiencing symptoms of dizziness or abdominal pain or nausea or vomiting. Data analysis was done by using bivariate analysis using Chi-square test (<math>\alpha</math>: 0.05). Data collection were done through interviews, observations and laboratory tests on the food samples.</p> <p>Result: The perceived symptoms were dizziness (77%), nausea (42%), abdominal pain (40%) and vomiting (8%). The case was 50 students (from 1-6 grade students) of total 116 students. AR found ranged from 14.3% to 60% with the highest AR found on class three (60%). The disease was spread through the common source with the incubation period of 15-240 minutes (mean 72.3 minutes). Risk foods are tempura (OR= 0.46 and p= 0.22), cimol (OR= 0 and p= 0.1) and calamari like (OR= - and p= 0.00). Calamari like positive Bacillus cereus and Rhodamine-B 10 mg/kg. We could not collect data from the food vendor since he fled.</p> |

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|    |                  | <p>Conclusion: The outbreak of food poisoning because calamari like contaminated <i>Bacillus cereus</i>. We suggested the school committee to provide the socialization of harmful food for the students. The teachers should restrict the permission for the food vendor to sell at school. Besides, the students should give socialization about how to process the food hygienically for the food vendors in Bandongan school.</p> <p>Keywords: Outbreak, Food Poisoning, <i>Bacillus cereus</i>, Rhodamine B, School Food</p>   |
| 15 | Nuratul Awaliyah | <p>Abstract Analysis of Health Problems at Purworejo 2015<br/>Nuratul A.1, Eti Setiati<sup>1</sup>, Trisno Agung Wibowo<sup>2</sup>, Zumrotul Chomariyyah<sup>3</sup><br/>1. Field Epidemiology Training Program (FETP), Gadjah Mada University, Indonesia 2. Field Epidemiology Training Program (FETP), Gadjah Mada University, Indonesia 3. The District Health Office of Purworejo, Yogyakarta</p> <p>Background : The District health office of Purworejo has a vision of "Realization Community Healthy of Purworejo, Independent and Fair". By analyzing the situation expected to obtain information that needs to be prioritized, so that implementation of the program in accordance with the problems encountered. Analysis of health problems is expected to assist and provide positive input for the District Health Office Purworejo.</p> <p>Methods : This research is a descriptive study. Data comes from secondary data, including data from each subdistrict in the District Health Office of Purworejo 2014. The criteria used in the identification of health problems is based on the achievement indicators of good performance the program or strategic plan, RPJMD 2014, SPM and MDG's or by other considerations are the trends/tendencies and endemicity.</p> <p>Results : The results is Analysis of health problems by using a hanloon calculation, obtained the following results: First priority: Diarrhea in coverage diarrhea handled, second: infant mortality rate (per 1,000 live births) and children mortality rate, Third priority: The discovery of TB cases BTA (+) / CDR, and Malaria, dengue, HIV &amp; AIDS, discovery Case Pnemonia Toddler, Scope K4 Maternity, Coverage of Neonates with complications were addressed, Service Coverage Gadar level 1 RS, Hypertension, discovery of AFP cases, diabetes mellitus, decompensation cordis , ISPA, Gastritis, and Bronchial Asthma.</p> <p>Conclusion: The priority intervention is needed, in order to resolve health problems that occur in Purworejo is diarrhea Diarrhea in coverage being handled, infant mortality rate (per 1,000 live births) and Akaba, discovery of TB cases BTA (+)/CDR. Problems in the Process of Health or disease that occurs in Purworejo There needs to increase surveillance,</p> |

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|    |                                   | <p>early warning of disease through the recording and reporting of Surveillans terpadu penyakit (STP) are continuous and immediate handling of the existing health problems.</p> <p>Keywords: Priority Problems, Analysis of Health Problems, Purworejo</p>   |
| 16 | Rimawati Aulia<br>Insani Sadarang | <p>The Evaluation of Cardiovascular Diseases Risk Factor Screening Program in Kulon Progo, Yogyakarta, Indonesia, 2016<br/>Rimawati A.I. Sadarang<sup>1</sup>, Sugiarto<sup>2</sup>, H. Kusnanto<sup>1</sup><br/>1. Field Epidemiology Training Program, Gadjah Mada University, Yogyakarta, Indonesia 2. Kulon Progo District Health Office, Yogyakarta, Indonesia ABSTRACT</p> <p>Background: In Kulon Progo, Cardiovascular Diseases (CVD) risk factor screening program had been established in four Primary Health Centers (PHCs) which had been appointed as sentinel of CVD service since 2009. Regularly monitoring showed that the progress of this program was still fluctuated and sometimes PHC did not report the output of this program. This study was purposed to evaluate the current condition of CVD risk factor screening program in CVD sentinel PHC.</p> <p>Method: Data was collected by interviewing Non Communicable Diseases (NCD) program officer in each CVD sentinel PHC and a NCD program officer in District Health Office (DHO) using structured questionnaire and by doing study of documentation.</p> <p>Result: There were three current conditions of this program. 1) Each CVD sentinel PHC had facilities to do CVD risk factor screening, but the condition of the health staffs nowadays was different from the early period of this program which had been trained with CVD comprehensive service. It was caused by the absence of transfer of knowledge among health staffs. 2) There was no standardized form for screening which made each CVD sentinel PHC reported different items. 3) Participation of health staffs from various services in CVD sentinel PHC in doing screening was low and it was impacted to the coverage of screening and to the reporting of the output.</p> <p>Conclusion: CVD sentinel PHC in Kulon Progo had not shown good performance in implementing CVD risk factor screening program. Collaboration and capacity building by doing communication and transfer of knowledge among health staffs in CVD sentinel PHC was needed. Kulon Progo DHO should decide a standardized form for CVD risk factor screening and follow up the using of the form.</p> <p>Keywords: Cardiovascular, Risk Factor Screening, Transfer of Knowledge, Standardized Form</p> |

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| 17 | Rosalia Kurniawati | <p>Screening of Pregnancy Anaemia in Temanggung District, Central Java Province Year 2015<br/> Harisaputra<sup>1</sup>, Rahayujati<sup>1, 2</sup>, Masruchi<sup>3</sup><br/> 1. Field Epidemiology and Training Program (FETP), UGM, Yogyakarta 2. Kulon Progo District Health Office, Yogyakarta 3. Women's Empowerment and Family Planning Board, Temanggung District</p> <p>Background: Maternal Mortality Ratio is one of population health status indicators. One of maternal death causes is anaemia in pregnancy. World Health Organization reported that the prevalence of iron deficiency anaemia in pregnancy is about 35-75%. Mild iron deficiency anaemia may have no significant signs and symptoms. However this eventually leads to a decrease in the quality of life even death.</p> <p>Methods: Screening of pregnancy anaemia in Temanggung District was done in sub-district in which public health center (PHC) having highest prediction of pregnancy anaemia prevalence based on highest maternal malnutrition cases (47,61%) in 2014 which was Temanggung PHC. Pregnancy anaemia was diagnosed using Sahli method and spectrophotometry as the gold standart. Respondent were asked for consent before being involved in this study. Analysis included sensitivity, specificity, positive predictive value, and negative predictive value to assess validity of the tool. Agreement and Kappa value used to assess tool reliability.</p> <p>Results: Gold standard examination of venous blood showed that 38% of respondent suffered from anaemia. Sensitivity, spesivicity, positive predictive value, and negative predictive value of Sahli method respectively were 100%, 19,3%, 43,2%, and 100%. Interrater agreement for Sahli was 92,39% with expected agreement 79,77%, and Kappa 0,62 with p value 0,000.</p> <p>Conclusions: This screening of pregnancy anaemia showed that Sahli method has high sensitivity and positive predictive value and good reliability although specificity and negative predictive value were low.</p> <p>Keywords: pregnancy anaemia, diagnostic, Sahli, spectrophotometry</p> |
| 18 | Selpi Pratiwi      | <p>Backgraund Global data about 2-3 million deaths annually have been prevented by immunization , 22 million babies in the world have not been fully immunized and 9.5 million are in the region of Southeast Asia , including Indonesia . Immunization coverage in Bogor Regency has not reached the target of 100 % of minimum service standards . Bogor regency still have few measles cases and measles risk populations so that in 2010 listed 25 times of outbreaks of measles with a total of 739 patient person .</p>   |

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|    |                  | <p>Methods and Result The primary data was done with indept interviews with some of the key informants. Analysis of problems disease that can be prevented by immunization with 2 stages, determine what the problem is and the next is to determine the priority issue. In determining the need to define criteria for priority problem, giving weight problems and determine the scoring against each weight problem used matrik. The results obtained are measles the firts order received a total score of 2688 , diphtheria second place with a total score of 2191 and finished third with neonatal tetanus in 1316.</p> <p>Counclusion Prioritas disease problems can be prevented by immunization in Bogor in 2015 is measles, diphtheria and neonatal tetanus.Recommendation including the Improving public knowledge about the importance of immunization in children under five years, in collaboration with the field of health promotion and community leaders, religious leaders and parties related. Optimizing rapid response role of health centers in the handling of cases and risk factors. Guarantee the availability of logistics in areas with difficult geographic conditions.</p> <p>Keywords: Situation Analysis, Measles, Diphtheria and Tetanus Neonatorum</p>  |
| 19 | Shinta Sumiarsih | <p>S.Shinta.(1), Rahayu. B. (1), Heryanto S.(2).<br/>1. Field Epidemiology and Training Program (FETP), Gadjah Mada University 2. Health Department, Wonogiri District, central java Province, Indonesia</p> <p>Background : The results of epidemiological surveillane of dengue disease that has been done by the Office of Wonogiri district health has not run as expected. By showing the development of the incidence of dengue in Wonogiri district which tends to increase from year to year as well as the important role of surveillance systems. It is necessary to evaluate the system of surveillance of dengue in Wonogiri to base prevention and control efforts in the next year. The purpose of this study was to evaluate the implementation of dengue epidemiology surveillance system.</p> <p>Method : Methods of evaluation of the dengue surveillance system in Wonogiri by giving questionnaires and observations using the check list to the management of surveillance P2 DBD in Puskesmas, Hospital and Wonogiri District Health Office. The timing of the evaluation of the surveillance system is in April-July 2014 in Wonogiri in 34 health centers, 6 Hospital and the Health Department part of Disease Control and Environmental Health Surveillance Section of dengue.</p> <p>Result : P2DBD officers who have been trained by (26.5%) and who have not followed the training of (73.5%). The officer who had been trained by the number of dengue surveillance training 1 times (73.5%), two times the amount of (17.6%) and three</p> |

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|    |               | <p>times the amount of (2.9%). Availability of the latest guidebook (0%). Reporting from the room after diagnosis on average were reported at that time 1-3 days (1x24 hours), to accelerate the reporting is done through telephone / mobile (100%).</p> <p>Conclusion : Surveillance of dengue disease in Wonogiri still experiencing weakness of the aspects of the components, inputs and processes, the researchers propose that more Enhancing the use of the manual surveillance of dengue in 2014 in an effort to increase knowledge in order to be fully utilized.</p> <p>Keyword : Surveillance, DHF, Wonogiri</p>   |
| 20 | Slamet Riyadi | <p>Outbreaks Investigation of food poisoning attack a family in Cilacap 2016<br/>Slamet Riyadi<sup>1</sup>, F. Dewi<sup>1</sup>, Semedi<sup>2</sup>, T. Rahayujati<sup>1</sup><br/>1. Field Epidemiology Training Program (FETP), Gadjah Mada University 2. Purbalingga District Health Office</p> <p>Background : Incidence of food poisoning outbreaks often occur in various areas, including in district of Cilacap. On Thursday, May 19, 2016, Cilacap District Health Office received report, there are 7 people in Karang Benda disease with the same symptoms after consuming food at family dinner. Purpose of this research to ensure existence of outbreaks, the source and mode of transmission of diarrhea.</p> <p>Methods : The study was descriptive with case report. Population were all people who living together with patient at the time of events of 10 people. These samples included 7 people. Calculation of frequency distribution and attack rate of food consumed was conducted to determine possible cause of an outbreak .</p> <p>Results : There were 7 cases with 3 men (42.86 %) and 4 women (57.14 %). Main symptoms are nausea, vomiting, dizziness, indigestion due to greasy foods, fatigue (100 %) and shortness of breath (42.85 %). Incubation period of 1-4 hours. Analysis attack rate by type of food as a source of poisoning soup has obtained the highest attack rate (100%). Laboratory results did not reveal bacillus cereus and staphylococcus aureus in food. By discussion with biologists, the fungal toxin poisoning is suspected to be cause ibotenic acid and muscimol.</p> <p>Conclusion : There has been an outbreak of food poisoning in Karang Benda District of Cilacap on May 18, 2016 that may be caused by toxins in mushrooms. Need efforts of health authorities to provide health education about the importance of hygiene and food sanitation and provide direct sample some of food harmful if consumed in order to avoid further cases of food poisoning.</p> <p>Keywords : outbreaks , food poisoning , mushroom toxins , fungi.</p> |

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| 21 | Sri Sahayati      | <p>EVALUATION OF CASE BASED MEASLES SURVEILLANCE (CBMS) USING SCORING SYSTEM IN SLEMAN<br/> Sri Sahayati, Isa Dharmawijaya, Dibyo Pramono<br/> Home country : Indonesia Presenter's email address : risafillah@gmail.com Name program director : Email address program director: Current trainee : 2014 Abstract</p> <p>Background: One of the strategies to carry out measles was CBMS in all health centers using the C1 form. C1 form recording collected by the District which is not on time. This was causing delayed recapitulation. Evaluation using scoring system has not been done before.</p> <p>Methods: Descriptive study was conducted. Variable to be evaluated were collecting data related to planning, training and skill, recording procedure, availability of fund, target achievement, guidance availability, data laboratory result sensitiveness, completeness, timeliness. Data were collected by interviewed total 25 officer in 25 Primary Health Center (PHC) using a questionnaire. Analysis methods Risk Priority Number (RPN) was conducted with giving score 1-10 for each aspect for its severity, occurrence, detectability and then ranked.</p> <p>Results: six (25%) made Planning Of Action (POA); 14 (60%) has been trained CBMS; 20 (83.3%) have a guidebook; invention cases, sampling, and the epidemiology code has been carried out by 25 programmer (100%); recording on the form C1 by 23 programmer (96%); sampling has reached the minimum target of 50% (512/524); outcome: adequate samples measles (4%); rubella (12%); equivocal (1%) and negative (83%). RPN showed do not training (score 1000/rank 1); no guidebook (900/2); timeliness, sensitiveness and completeness (648/3); do not built POA (400/4); funding (392/5); recording (120/7); target achievement (80/8).</p> <p>Conclusion: CBMS not reach the target due to the officers not trained, no guidance, do not built POA so it impact to outcomes. This was evidenced by the discovery of positive cases of laboratory confirmed measles were small even there were outbreak. Recommendation was giving training for programmer in PHC with purpose theme.</p> <p>Keywords: evaluation, measles, score, rank</p> |
| 22 | Stefanie Juergens | <p>PREDICTORS OF LOST TO FOLLOW UP AND MORTALITY IN CHILDREN <math>\leq</math> 12 YEARS OLD RECEIVING ANTIRETROVIRAL THERAPY FOR THE FIRST YEAR IN A CENTRAL REFERRAL HOSPITAL IN BALI, INDONESIA<br/> S Jürgens<sup>1</sup>, AAS Sawitri<sup>1,2</sup>, KD Kumara<sup>3</sup>, IWGAE Putra<sup>1,4</sup>, TP Merati<sup>5</sup><br/> <sup>1</sup> Public Health Postgraduate Program Udayana University, <sup>2</sup> Department of Community and Preventive Medicine, Faculty of Medicine University of Udayana, <sup>3</sup> Department of Paediatrics, Faculty of Medicine University of Udayana-RSUP Sanglah, <sup>4</sup> School of Public</p>  |

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|    |                | <p>Health Udayana University, 5 Department of Internal Medicine, Faculty of Medicine University of Udayana-RSUP Sanglah</p> <p>Background: Very little is known about predictors of LTFU and mortality in children in Asia. Many HIV-infected children in Bali have started antiretroviral therapy (ART), but loss to follow up (LTFU) can be substantial. LTFU and mortality in children receiving ART is different and more complex compared to adults, since they dependent on their caregivers.</p> <p>Method: The study design was a retrospective cohort study using secondary data of 138 HIV positive children receiving ART in Sanglah General Hospital, Bali between January 2010 until December 2015. Kaplan-Meier analysis was used to describe incidence rate and median time to LTFU/mortality and Cox Proportional Hazard Model was used to identify its predictors. Analysed variables were socio-demographic characteristics, birth history, primary care giver and clinical characteristics at first hospital visit and/or at ART initiation.</p> <p>Result: The overall mean age when starting ARV therapy was 3.21 years old. The higher the WHO stage, when stating the ARV therapy, the trend shows a higher risk for LTFU/mortality as well as low body weight (AHR.... CI). Of all patients receiving ART, 25% experienced LTFU/death by 9.1 month resulting in an incidence rate of 3.28/100 child-month.</p> <p>Conclusion: The study found that only clinical characteristics can be used as predictors for LTFU/mortality and not socio-demographic characteristics, birth history and primary care giver.</p> <p>Key words: LTFU, mortality, paediatric, children, ART, Indonesia</p> |
| 23 | Totok Sutianto | <p>Author : Totok Sutianto Name of FETP : University of Indonesia<br/>Title : The Infections Event of HAIs Potential base class of treatment in Ciawi Hospital, 2015</p> <p>Background: Hospital acquired infections (HAIs) is the most frequent adverse event in health care, cause additional costs for health systems or patients and their family, and unnecessary deaths. Most of hospitals in Indonesia including Ciawi hospitals implement HAIs prevention and control program to prevent the occurrence of HAIs. This study aimed to describe the magnitude of HAIs in Ciawi hospital.</p> <p>Methods : A descriptive analysis of surveillance data from Infection and Prevention Control Comittee was performed.</p> <p>Result : In 2015, there were 610 cases of HAIs in Ciawi hospital. Phlebitis (99%) were the highest incidence among all HAIs cases, Urinary Tract Infections (UTI): 1%, no Surgical</p>  |

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|    |                     | <p>Wound Infections reported. Analysis on the distribution of phlebitis by ward showed that class III ward has the highest incidence (69%), class II ward: 14%, and class I ward: 5%, intensive care: 8%, the premier class: 2%, and VIP: 2%. There are no laboratory tests for diagnosis HAIs.</p> <p>Conclusion : Class III treatment in Ciawi hospital into place with a high risk of phlebitis. Suggested perform targeted surveillance (focused) on the surveillance of infectious diseases. Evaluate after 4 months of surveillance, optimizing the role and function of IPCN and IPCNL. Epidemiologist required in infection preventing and control Ciawi hospital Committee.</p> <p>Keywords : infections, HAIs, phlebitis, class of treatment</p>  |
| 24 | WARDIANSYAH<br>NAIM | <p>Background: Human Immunodeficiency Virus (HIV) is a crucial problem to be tackled. Pasuruan District Health Service data in 2015 showed a trend increase in the number of cases of HIV/AIDS over the years since the first reported case. The cumulative number of HIV/AIDS from 1993 to 2015 was as many as 1,074 cases. This study aimed to evaluate the implementation of HIV/AIDS surveillance based on attributes in Pasuruan District Health Office 2016.</p> <p>Method: This study uses descriptive survey design. Subjects were surveillance officers HIV/AIDS Health Department and Community Health Center. Data were collected by interview and document study. Data analysis techniques obtained from interviews and observations were analyzed descriptively.</p> <p>Results: The results show 94.11% attributes of simplicity, flexibility as much as 83.21%, the acceptability as much as 100%, the sensitivity as much as 47.05%, the data was analyzed according to the epidemiological variables (representative), punctuality reporting cases as much as 47.06%, data quality as much as 82.35%, and the stability of the data as much as 76.47%.</p> <p>Conclusion: Evaluation of HIV/AIDS surveillance in Pasuruan District Health Office based on the attributes already simple, acceptable, high flexibility, low sensitivity, high NPP, representative, not timely, high data quality, and high stability. Suggestion: Improve the professionalism of officers through training in HIV/AIDS surveillance, advocacy to other agencies in the field of HIV/AIDS to participate in surveillance activities, increase participation across sectors and programs in surveillance cases, intensify the dissemination of information to increase understanding of the larger community about HIV/AIDS to raise awareness of the threat of HIV/AIDS.</p> <p>Keywords: Surveillance system, HIV/AIDS, Evaluation, Surveillance Attributes</p> |

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| 25 | Windalia Apriani Fitri | <p>ANALYSIS OF HEALTH PROBLEMS IN KULON PROGO DISTRICT DAERAH ISTIMEWA YOGYAKARTA, INDONESIA 2014</p> <p>Windalia Apriani Fitri<sup>1</sup>, Riris Andono Ahmad<sup>1</sup>, Th. Baning Rahayujati<sup>2</sup> <sup>1</sup>Field Epidemiology Training Programs, Gadjah Mada University <sup>2</sup>Kulon Progo District Health Office, Daerah Istimewa Yogyakarta</p> <p>Background: Based on the achievement of the results of activities in the field of Communicable Disease and Environmental Health (P2PL) in Kulon Progo district health office by comparing the Medium Term Development Plan (RPJMD) there are those who have not reached the target. Therefore, it is necessary to analyze the situation and prioritization of health issues for formulating recommendations in solving health problems</p> <p>Methods: This study uses an observational study that analyzed descriptive. Data activities in 2010 to 2014 were collected from the 12 stakeholder Health Department on January 29 until February 11, 2015 and classified using methods Hanlon based criteria magnitude of the problem, the seriousness of the problem, the effectiveness of the solution to the problems there and PEARL (Propriety, economic feasibility, acceptability, resource availability and legality</p> <p>Results: There were 21 health problems and after prioritization found with 10 health problems priority: maternal mortality rate (72.78), HIV/AIDS (69.81), the prevalence of malnutrition (69.44), dengue fever (69.21), malaria (68.72), infant mortality rate (66.87), pulmonary tuberculosis (64.44), low birth weight (62.60), complete primary immunization (61.93) and childhood mortality rate (56.46).</p> <p>Conclusion: The 10 priority of issues in Kulon Progo: maternal mortality rate, HIV/AIDS, the prevalence of malnutrition, dengue fever, malaria, infant mortality rate, pulmonary tuberculosis, low birth weight, complete primary immunization and childhood mortality rate. Recommendation health problem are improve integrated antenatal care, strengthening the communicable disease surveillance system, childhood health education for mother and increasing coverage of primary immunization.</p> <p>Keywords: Analysis of health problems, Hanlon method, maternal mortality rate, Kulon Progo.</p> |
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