

Report – INTREC Block 2

Workshop on Quantitative and Qualitative Research Methods for Social Determinant of Health

Hotel Santika Premier Jogjakarta, April 1st – 11th, 2014

Social Determinant of Health (SDH) has been recognised as an essential factor influencing health inequalities within country and between countries. Therefore, INDEPTH WHO-SAGE in collaboration with UGM held a workshop on Qualitative and Quantitative Research Methods in order to encourage young researchers to conduct SDH research, which in terms of numbers, is currently limited. The result of these researches will provide evidence for health policy making to eliminate disparities and improve health status in the community.

This workshop was held in two weeks which was delivered by 4 SDH experts: Heribert Ramroth and Nicholas Henschke from Heidelberg University, Joke Haafkens from Amsterdam University, and Kjerstin Dahlblom from Umea University. Heribert and Nicholas delivered Quantitative Methods at the first week, while at the second week, Kjerstin and Haafkens gave Qualitative methods. It was attended by 16 enthusiastic young researchers from India, Vietnam, PNG, and Indonesia, and observed by Anna Mirny from Harvard Population Studies who was the coordinator for the overall training of INTREC.



Figure 1. Lectures and participants in front of the hotel

The workshop was hosted by the Center for Health Policy and Management, Faculty of Medicine, Universitas Gadjah Mada, Indonesia, led by Prof. Laksono Trisnantoro. The organizer was Sealvy Kristianingsih and Siwi Padmawati.

Quantitative Research Methods

The workshop started by the introduction of all participants, about their background and research experiences. Most of them are currently involved in SDH related research in their country. Herbert and Nicholas discussed some important topics on quantitative research comprehensively during the first week i.e. introduction of SDH, study design, sampling, basic statistics, descriptive analysis, correlation, regression, longitudinal analysis, logistic regression, multilevel models and finally presentation and interpretation of results. The lectures were then followed by group exercises.



Fig 2. Research design consultation



Fig 3. Group Presentation

In group exercise, participants were able to identify research questions, and methods and measurement tools from 2 papers given. After understanding the basic of study design, participants then were assigned to develop their own research question including study design and measurement variables, which were presented in the class in order to obtain feedback from others. Both instructors assisted actively through intensive discussion with each participant. These young researchers discussed seriously their research topics such as TB, diabetes mellitus, obesity, tobacco regulation, mental health, maternal and child health, teenage pregnancy, school sanitation, etc. Participants also had opportunities to practice in interpreting quantitative findings from some published papers provided by lecturers.

Qualitative Research Methods

Qualitative research methods were delivered intensively by Kjerstin and Haafkens at the second week of workshop through lectures, discussions and field visit. The participants learnt about qualitative research design, sampling, research questions, ethical considerations, trust worthiness, collecting data through observations, interviews, focus group discussion, and finally analysis and writing up the study report. They were expected to be able to differentiate between quantitative and qualitative methods, and eventually be able to choose the appropriate method that fit to their research. Only few participants had previous experience in conducting qualitative research. Therefore, in order to improve their skills, participants were actively involved in group exercise through role play for interviews and focus group discussions in varied situations. As researchers, having these skills are really important.



Fig. 4 Primary health centre of Gondokusuman 2

Participants had great opportunity to make short observations in a primary health centre “Gondokusuman 2” as well as in the kampong (neighbourhood) located nearby the hotel. One group observed services provided by PHC such as dental clinic, psychological consultation, laboratory examinations, doctor’s room, waiting room, maternal and child health clinic, and pharmacy. They also had a chance to interview laboratory technicians, midwives, psychologist and patients, to add information for their observations. Meanwhile, other groups also made interesting community observations particularly on smoking, water and sanitation, etc. These two hour observations were then presented in the class to get feedback from others. After data collection, finally in groups, they also practiced in analysing those qualitative data as well as in presenting findings to journal paper.



Fig. 6 Group Discussion in-class and out-class

From the evaluation at the last day, participants provided some suggestions such as more hours are needed for practice particularly in analysis both for quantitative and qualitative data. Overall, participants' feedback showed that this SDH research methodology workshop was successful and was beneficial for them to improve their knowledge and skills particularly in developing SDH research.

Annex 1. List of Participants

No.	Name	Institution/ HDSS	Country
1.	Bharat Sudam Chaudhari	Vadu	India
2.	Uddhavi Chavan	Vadu	India
3.	Anamitra Barik	Birbhum	India
4.	Rebecca Emori	PIH	Papua New Guinea
5.	Nguyen Thi Minh Thoa	Dodalab	Vietnam
6.	Nguyen Thai Quynh Chi	Chililab HDSS/HSPH	Vietnam
7.	Ifta Choiriyah	Purworejo / UGM	Indonesia
8.	Citra Indriani	Purworejo / UGM	Indonesia
9.	Dwidjo Susilo	UGM	Indonesia
10.	Supriyati	UGM	Indonesia
11.	Ktut Rentyasti Palupi	UGM	Indonesia
12.	Nandyan Nurlaksana	UGM	Indonesia
13.	Likke Prawidya Putri	UGM	Indonesia
14.	Puti Aulia Rahma	UGM	Indonesia
15.	Andriani Yulianti	UGM	Indonesia
16.	Faisal Mansur	UGM	Indonesia

**INTREC Block 2
Yogyakarta workshop April 2014 Participants**



Uddhavi - India



Bharat - India



Anamitra - India



**Rebecca – Papua
New Guinea**



Chi - Vietnam



Thoa - Vietnam



Citra - Indonesia



Ifta - Indonesia



Nandy - Indonesia



Dwidjo - Indonesia



Likke - Indonesia



Supri - Indonesia



Puti - Indonesia



Faisal - Indonesia



Ktut - Indonesia



Andri - Indonesia

Annex 2. Schedule of Workshop



Block 2 – Workshop on Quantitative and Qualitative Research Methods for Social Determinants of Health

Tuesday Day 1 08:30	10:00	10:30	12:00	13:30	15:00	15:30	17:00
<p>Welcome! Introduction to course and short presentation of participants and teachers</p> <p>Lecture Introduction to SDH research and measurement</p>	<p>B R E A K</p>	<p>Group discussion/exercise Measurement methodology in SAGE publications</p>	<p>L U N C H</p>	<p>Lecture Study designs for research on SDH</p>	<p>B R E A K</p>	<p>Group discussion/exercise Developing your analysis plan – using the correct measurement tools</p>	
Wednesday Day 2 08:30	10:00	10:30	12:00	13:30	15:00	15:30	17:00
<p>Lecture Describing data; normal distribution; measures of variance</p>	<p>B R E A K</p>	<p>Group discussion/exercise Descriptive analyses in SAGE publications</p>	<p>L U N C H</p>	<p>Lecture Hypothesis testing; analysing continuous and categorical data</p>	<p>B R E A K</p>	<p>Group discussion/exercise Developing your analysis plan – using descriptive analyses</p>	
Thursday Day 3 08:30	10:00	10:30	12:00	13:30	15:00	15:30	17:00
<p>Lecture Correlation and regression</p>	<p>B R E A K</p>	<p>Group discussion/exercise Correlation and regression in SAGE publications</p>	<p>L U N C H</p>	<p>Lecture Longitudinal analysis and survival</p>	<p>B R E A K</p>	<p>Group discussion/exercise Developing your analysis plan – using correlation and regression</p>	

Friday Day 4 08:30	10:00	10:30	12:00	13:30	15:00	15:30	17:0
Lecture Logistic regression	B R E A K	Group discussion/exercise Logistic regression in SAGE publications	L U N C H	Lecture Introduction to multilevel models	B R E A K	Group discussion/exercise Developing your analysis plan – using logistic regression and multilevel models	
Saturday Day 5 08:30	10:00	10:30	12:00	13:30	15:00	15:30	17:0
Lecture Introduction to mixed methods research	B R E A K	Group discussion/exercise Tables and figures in SAGE publications	L U N C H	Lecture Presentation of results	B R E A K	Group discussion/exercise Developing your analysis plan – presentation of results	
REST DAY							
Monday Day 6 08:30	10:00	10:30	12:00	13:30	15:00	15:30	17:00
Introduction to course Lecture 1 Qualitative research methods - Overview	B R E A K	Lecture 2 Social determinants of health and qualitative research	L U N C H	Lecture 3 Formulating qualitative research questions	B R E A K	Discussion/hands on session Formulate qualitative research question in relation to SDH work from one's own settings	
Tuesday Day 7 08:30	10:00	10:30	12:00	13:30	15:00	15:30	17:00
Lecture 4 Qualitative research design Sampling	B R E A K	Lecture 5 Practical and ethical considerations	L U N C H	Lecture 6 Collecting qualitative data Observations Preparing a obs. protocol	B R E A K	Lecture 7 Research interviews - Focus Group Discussions Preparing for field work and preparing a question guide	

Wednesday Day 8 08:30	10:00	10:30	12:00	13:30	15:00	15:30	17:00
Group exercise Interviewing		Group exercise Interviewing		Group exercise Focus Group Discussions		Group exercise Focus Group Discussions	
Thursday Day 9 08:30	10:00	10:30	12:00	13:30	15:00	15:30	17:00
Field work Participant observations			L U N C H	Reporting back of experiences with data collection exercises	B R E A K	Lecture 8 Focus of qualitative data- analysis Relating results data- analysis to research question and sample	
Friday Day 10 08:30	10:00	10:30	12:00	13:30	15:00	15:30	17:00
Group work Analysis of field work data	B R E A K	Group work Reporting back of experiences with data analysis	L U N C H	Lecture 9 Writing up a qualitative study report/ research proposal Quality criteria/ trustworthiness	B R E A K	Group session Discussion of participants abstracts for papers/research plans Where do we go from here	