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Implementation of interprofessional collaboration practice for pregnancy with heart diseases referral services in Semarang

Submission date 01/02/2019	**Recruitment status** No longer recruiting	[_] Prospectively registered [X] Protocol
Registration date 05/02/2019	**Overall study status** Completed	[_] Statistical analysis plan [_] Results
Last Edited 02/05/2025	**Condition category** Circulatory System	[_] Individual participant data [_] Record updated in last year

Plain English summary of protocol

Background and Study Aims
The instance of pregnancy with heart diseases has been increasing nowadays on average 2-5% in several countries. In Indonesia, pregnancy with heart diseases become one of the maternal death causes of 10-20% cases in the last four years. Heart disease in pregnancy requires management that involves a various health professionals from primary to tertiary health care facilities consisting prenatal services, ANC examinations, delivery care, and postpartum services by general practitioners and midwives in primary health care, to tertiary health facilities that are usually performed by obstetrician and cardiologists who are available both at secondary and tertiary health facilities. This research aims to develop inter health care facilities referral procedures to facilitate interprofessional collaboration practice to give the best quality of health care for pregnant women with heart diseases.

Who can participate
112 health professional in the maternal referral network system of Sultan Agung Islamic Hospital in Semarang Indonesia.

What does the study involve?
This study consisting of 4 stages:
1. Diagnostic stage aims to assess promoting and hindering factors of interprofessional collaboration practice in referral services for pregnancy with heart diseases
2. Planning stage aims to develop an initial draft of services and referral procedure for pregnancy with heart diseases which will be applied for the next stage
3. Implementation stage aims to implement ICP in maternal referral system for pregnancy with heart diseases in Semarang. Training for all health professionals will be conducted to initiate the implementation process, then monitoring and coaching will be carried out to ensure the fidelity of the process
4. Evaluation stage aims to improve the ICP through reviewing and auditing all of the implementation processes to uncover adversity, then discussion among expert and health professional to fix it.

What are the possible benefits and risks of participating?
Health professional may benefits knowledge, training and coaching about interprofessional collaboration practice, which has been proven to improve the quality of health services. The woman receiving health services from this study will have a positive experience regarding Interprofessional collaboration practice implementation and there is no significant risk in this study.

Where is the study run from?
Universitas Islam Sultan Agung, Semarang Indonesia

When is the study starting and how long is it expected to run for?
July 2018 to July 2022

Who is funding the study?
Universitas Islam Sultan Agung Semarang, Indonesia
The Ministry of Research, Technology, & Higher Education Indonesia

Who is the main contact?
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Contact information

Type(s)
Scientific

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Study information

Scientific Title
Implementation of interprofessional collaboration practice in integrated care pathway formulation for pregnancy with heart diseases referral services in Semarang

Acronym
ICoPregHD

Study objectives
Interprofessional collaboration practice will improve the quality of maternal referral services related to pregnancy with heart disease

Ethics approval required
Old ethics approval format

Ethics approval(s)
Approved 28/06/2018, Medical and Health research ethics committee (MHREC) of the Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada (Radiopoetro Building at the west of 2nd floor, Jl. Farmako, Sekip Utara, Yogyakarta, Indonesia 55128; +62274 588688 line 17225; +62811-2666-869; mhrec_fmugm@ugm.ac.id); ; ref. KE/FK/0611/2018.

Primary study design
Interventional

Study design
Participatory action research

Study type(s)
Treatment

Health condition(s) or problem(s) studied
Pregnancy with heart disease

Interventions
This study design is participatory action research, consisting of 4 stages:

Diagnostic stage, this stage aims to assess the barriers and supporting factor of interprofessional collaboration practice in maternal referral services through in-depth interviews with general practitioners, obstetricians, cardiologists, and head of maternity ward, and FGDs for clinical and community midwives. In addition, the researchers also assessed IPCP evidence through a medical record review to see their respective roles in patient management.

Planning stage, this stage aims to develop integrated care pathways to regulate the roles and responsibilities of each profession and health facilities in the pregnancy with heart diseases management. ICP will be adopted from a referral guide that had been implemented in another city in Indonesia and adjusted to the guidelines for pregnancy with heart diseases from ESC (European Society of Cardiology)

Implementation stage: This stage consists of ICP Training for all health workers who provide services for pregnancy with heart diseases, monitoring and coaching will be done for 1 year to ensure the fidelity of the implementation process as well as fixing problems that may arise in implementation, as well as finding various obstacles and supporting factors in the process of implementing ICP.

Evaluation phase: this stage is routinely carried out by the principal investigator and participants to evaluate the ICP implementation. This stage assesses the constraints and supporting factors of the implementation of the IPCP, then performs ICP improvements based on the findings.

Intervention Type
Mixed

Primary outcome(s)
The fittest Integrated care pathway in maternal referral system: Integrated care pathway related to pregnancy with heart diseases will be generated from this 4 cyclic stage of participatory action research. The fist draft is generated from the second stage and will be improved along with the third and fourth stage base on the findings.

Key secondary outcome(s)
1. The description of the maternal referral system in Semarang will be obtained from a focus group discussion among midwives and nurses, in-depth interviews with physicians, obstetricians, cardiologists, and medical record reviews in 2017 and 2018.
2. Knowledge of health workers about the IPCP that will be assessed from participants of stages 2 and stage 3 using the IPCP quiz.
3. The attitude of health workers to the IPCP that will be assessed from participants of stages 2 and stage 3 uses IPAS.
4. Health workers' perceptions of the IPCP that will be assessed from participants of stages 2 and stage 3 using PINCOM-Q.
5. Acceptability, appropriateness, adoption and feasibility of participant with IPCP implementation will be obtained from in-depth interviews with health professionals who have used the IPCP to pregnancy with heart diseases case management.
5.1. Acceptability: This variable shows the level of health professional acceptance (cardiologists, obstetrician, general practitioners, midwives and nurses) to the interprofessional collaboration practices in the integrated care pathway development and implementation related to pregnancy with heart diseases. The variable consist of comfort, credibility and the health profession's views about the benefits from interprofessional collaboration practice.
5.2. Appropriateness is the compatibility of interprofessional collaboration practices with maternal referral services for pregnancy with heart diseases in referral network in Semarang.
5.3. Adoption is the use or intention to try the interprofessional collaboration practice in maternal referral services related to pregnant women with heart diseases in Semarang.
5.4. Feasibility is the ability of interprofessional collaboration practice in maternal referral services related to pregnancy with heart diseases in Semarang, including inhibiting and supporting factors of interprofessional collaboration implementation.
6. Fidelity of ICP implementation on maternal referral system related to pregnancy with heart diseases, this outcome will be assessed by observing and comparing the ICP guidelines and the implementation.

Completion date
01/07/2022

Eligibility

Key inclusion criteria
Health professionals:
Physicians, obstetricians, cardiologists, midwives, and nurses who work with pregnancy with heart diseases at Sultan Agung Islamic Hospital and its maternal referral network.

Patients:
Pregnant women with heart diseases who have been examined in the Sultan Agung Islamic Hospital and its referral network.

Participant type(s)
Mixed

Healthy volunteers allowed
No

Age group
Mixed

Sex
All

Key exclusion criteria
N/A

Date of first enrolment
01/09/2018

Date of final enrolment
01/07/2021

Locations

Countries of recruitment
Indonesia

Study participating centre
Faculty of Medicine Universitas Islam Sultan Agung
Jl. Raya Kaligawe Kilometer 4
Semarang
Indonesia
50112

Sponsor information

Organisation
Universitas Islam Sultan Agung

ROR
https://ror.org/015hejj83

Funder(s)

Funder type
University/education

Funder Name
Universitas Islam Sultan Agung, Semarang, Indonesia

Results and Publications

Individual participant data (IPD) sharing plan
The data sharing plans for the current study are unknown and will be made available at a later date.

IPD sharing plan summary
Data sharing statement to be made available at a later date

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Protocol article	protocol	09/10/2020	14/10/2020	Yes	No
Other publications	Embedded explanatory sequential mixed method study of factors associated with provider adherence	27/08/2024	02/05/2025	Yes	No