

**THE SITUATIONAL ANALYSIS (SA) REPORT
IN SOUTH KALIMANTAN
ON 6th – 18th NOVEMBER 1995**

WRITTEN BY
SONY WREKSONO
CONSULTANT OF
MOTHERCARE / FKM UI
AND
DIANA R. BECK
LONG-TERM ADVISOR OF
MOTHERCARE / ACNM

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Department of Health (Kanwil and Dinas)
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ATTACHMENT

I	Time schedule	
II	Team-work schedule	
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IV	Instrument of the Situational Analysis	
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LIST OF ABBREVIATIONS & TERMINOLOGY

Bidan	Midwife
Bidan di Desa	Village Midwife
Puskesmas/PKM	Primary Health Centre
Rumah Bersalin/RB	Delivery clinic

I BACKGROUND

For the past many years Indonesian government has realized the importance of Bidan's (Midwife) and Bidan di Desa (Village Midwife =BD s) roles in implementing health care services to mothers and their babies. Therefore, there is a policy in the government to assign BD in every village in Indonesia.

One of the aims of assigning Bidan at the village level is to improve the quality of mothers' health, especially in reducing the rate of Mother Mortality Rate (MMR). The major health problem in Indonesia, concerning mothers' healths, is the unacceptably high MMR and its slow reduction in the last decade. The data showed that in 1986 there were 450 per 100,000 live births and only slightly decreased to 420 per 100,000 live births. At the end of Pelita VI in 1999, it is planned that MMR will be 225 per 100,000.

MMR mainly caused by haemorrhage, eclampsia and sepsis. Haemorrhage and sepsis partly are the results of prolonged labor and abortion. Other risk factors including the age of the pregnancy (too young or too old) and less than two-year space between pregnancies, malnutrition, and infectious disease, such as STD, tuberculosis, and malaria. Meanwhile, other problems exist, such as low rate of antenatal visit and of deliveries assisted by health professionals. The limitation of coverage is due to geographical condition, population distribution and other factors related to socioeconomic, cultural and educational level of the community.

To overcome the problems, several actions have to be made. Referral facilities have to be improved, include providing 24-hour service for comprehensive emergency obstetric care in the district hospitals, availability of BDs across the nation to diminish delayed labor, and easy reaching health facility.

II GOALS OF SITUATIONAL ANALYSIS

The goals of the situational analysis which were accomplished by Mothercare, IBI and Department of Health (Kanwil/Dinas) the province of South Kalimantan were to obtain information on the extent of the availability of the system and individual capacity of health-care provider in 3 kabupaten in the province of South Kalimantan, especially in dealing with maternal and antenatal cases.

The specific aims of this study were as follows

- 1 To measure the quality of several management facilities and type of services for maternal and antenatal cases
- 2 To make an inventory of physical infrastructure, laboratory services, basic equipment, essential drugs and educational materials (IEC) which were needed to resolve maternal and antenatal problems
- 3 To examine the quality of record and report of maternal and antenatal cases
- 4 To determine the capacity and work load of blood banking services of the province of South Kalimantan, and to define the ability of referrals centre to perform blood transfusion

III METHODOLOGY

1 The design of the data collection

This study applied a cross-sectional data collection design by using a questionnaire. The questionnaire was divided into 17 sections (modules). The respondents of the study included the heads of 25 health centres (hospitals and puskesmas/PKM) and health care providers whose in charge of the management of maternal and antenatal care. The interviewers involved were three medical doctors and three senior midwives.

2 Procedures

The data collection started on Monday, 6th November 1995 and finished on 18th November 1995. On the first day the interviewers were briefed to match their perception in how to fill the questionnaire. Then, for twelve days onward the interviewers visited the health care providers in their work places. They collected the data for SA study as well as supervised the management of the TNA.

Overall, there were three Kabupaten included in the study. They were Kabupaten Banjar, Kabupaten Hulu Sungai Selatan and Kabupaten Bario Kuala Banjarmasin, the capital city of South Kalimantan Province also included in the study. There were 6 hospitals (including one delivery clinic), 10 PKM with bed and 9 PKM without bed being studied.

IV FINDINGS AND RESULTS

4.1 Management and Services

1. Services coverage

All of the PKM (with and without bed) had the knowledge of the catchment population, whereas the hospital had no knowledge of it. This was understandable because the hospitals, as referral facilities, accept patients from many other health facilities, including from outside their territory.

The mean of catchment population for PKM with bed was 18,530.50 and for PKM without bed was 14,238.56. It was an astonishing number compared to the availability of human resources at both facilities. In average PKM with bed had only 8 Bidan and PKM without bed had only 7 Bidan. This meant that every Bidan had to serve approximately 2,189 and 1,830 people in PKM with bed and without bed.

2. Type of services

Table 1 shows the type of services

Table 1 Type of services by type of clinics

Type of services	Hospital	PKM with bed	PKM without bed
Antenatal care	100%	100%	100%
TT immunization	100%	100%	100%
Treatment of STDs	100%	100%	100%
Syphilis testing	50%	0%	0%
Iron folate for anemia	100%	100%	100%
Normal delivery care	100%	100%	44.4%
Vacuum extraction	100%	10%	0%
Forceps delivery	83.3%	60%	11.1%
Caesarean section	83.3%	0%	0%
Blood transfusion /replacement	100%	20%	0%
Rooming in for postpartum	100%	50%	0%
Postpartum checkup	100%	100%	55.6%
Family planning services	100%	100%	100%
Abortion	100%	90%	33.3%

PKM with bed able to provide 12 out of 14 types of services, only slightly lower than the hospitals which could perform all type of services. But several types of services still much lower in rate compared to the hospitals, e.g. vacuum extraction only 10% at PKM with bed compared to 100% at the hospitals, blood

transfusion or replacement only 20% at PKM with bed compare to 100% at the hospitals, and rooming in for postpartum 50% at PKM with bed compare to 100% at the hospitals

With shortage of human resources at PKM with bed in mind, this accomplishment is certainly overwhelming. Bear in mind that there was only approximately one physician at PKM with bed compare to around 12 physicians at the hospitals

PKM without bed could only provide 9 out of 14 services which several of them within the range of 11.1% to 55.6%

3 Type of complication managed at the facilities

Table 2 shows Hospitals and PKM with bed could manage all types of complications. And amazingly, PKM without bed could manage 13 out of 14 types of complications, even though not all of PKM without bed could manage them

Table 2 Type of complication by type of clinics

<i>Type of complication</i>	<i>Hospital</i>	<i>PKM with bed</i>	<i>PKM without bed</i>
Anemia	100%	100%	100%
RTI including syphilis	100%	90%	66.7%
Ectopic pregnancy	83.3%	0%	0%
Antepartum Haemorrhage	100%	40%	22.2%
Pre-eclampsia	100%	60%	88.9%
Eclampsia	100%	20%	22.2%
Laceration repair	100%	90%	88.9%
Postpartum Haemorrhage	100%	90%	44.4%
Abortion complication	100%	90%	55.6%
Retained placenta	100%	100%	77.8%
Breech delivery	100%	90%	33.3%
Obstructed labor	100%	90%	22.2%
Sepsis	100%	60%	22.2%
Resuscitation of newborn	66.7%	60%	11.1%

4 Emergency services

The result in table 3 shows that PKM with bed were well equipped with maternity services and 24-hour on-call services for caring for complicated deliveries similar to that of the hospital. May be this was due to the fact that all physicians of PKM with bed lived near by the facilities. However only the hospital were equipped with on-call services for obstetric surgery

All PKM, including PKM without bed, owned a vehicle for emergency transport of patients. Whereas only 83.3% of the hospital had the vehicle,

although the distance between the hospital and their referral facilities were further (70 km) compared to PKM with bed (22,5 km) and PKM without bed (10 km) The time used to get from the kabupaten hospital to Ulin Hospital was approximately 2 hours by car Meanwhile, the time used to get from PKM to the nearest kabupaten hospital was around 15 minutes

Table 3 Emergency services by type of clinics

<i>Emergency Services</i>	<i>Hospital</i>	<i>PKM with bed</i>	<i>PKM without bed</i>
Maternity services all of the time	100%	100%	33 3%
On-call services all of the time	100%	100%	33 3%
On-call obstetric surgery all of the time	83 3%	0%	0%
Have a vehicle for emergency transport	83 3%	100%	88 9%

5 Referrals

Table 4 shows hospitals acquired more referral cases than PKM, as expected In a year, they were dealing with approximately 25 cases from physicians, 55 cases from Bidan, 22 cases from Bidan di Desa (BD) and 9 cases from traditional birth attendance (TBA) Meanwhile PKM with bed acquired 2 cases from physician and 4 cases from Bidan, and PKM without bed received 1 case from BD

Table 4 Number of Maternal complication

<i>Maternal complication</i>	<i>Hospital (Mean)</i>	<i>PKM with bed (Mean)</i>	<i>PKM without bed (Mean)</i>
Pre-eclampsia-Eclampsia	18 75	1 83	1 00
Antepartum Haemorrhage	4 50	50	00
Postpartum Haemorrhage	24 50	2 00	00
Premature Rupture of Membranes	6 25	67	00
Prolonged Labor	30 75	1 67	00
Preterm Labor	7 00	33	00
Infection	75	23 25	00
Abortion	23 25	5 00	00
Ectopic Pregnancy	2 50	00	00
Family Planning	2 25	00	00
Complication			
Other	00	2 33	00

The average of referral cases taken by the hospitals in a year according to 11 types of maternal complications were 120 cases, by PKM with bed were 14 cases and by PKM without bed was 1 case But there were only 5 cases referred to the

hospital for neonatal complications and 1 case to PKM with bed. The low frequency observed here might be due to poor medical record.

4.2 Facilities, equipment and supplies

1. Physical infrastructure for maternal care

The study showed that PKM with bed owned 18 out of 20 types of infrastructure for maternal care. Unfortunately, only a few of them were in good condition. Many of them were available, but in unsatisfactory condition. But the availability of the infrastructure at the PKM with bed was in fact fortunate state compared to the hospital.

Table 5 Physical infrastructure by type of clinics

<i>Physical Infrastructure</i>	<i>Hospital (n=4)</i>	<i>PKM with bed (n=10)</i>	<i>PKM without bed(n=9)</i>
Examination room providing client privacy	100%	80.0%	44.4%
Table and stool for gynaecological examination	100%	90.0%	66.7%
Examination light for gynaecological examinations	100%	90.0%	44.4%
Standard operating procedure	50%	0%	0%
Flow charts for maternal health care	50%	20.0%	0%
Storage area for drugs and other supplies	100%	100.0%	55.6%
Toilet facilities/latrine	50.0%	30.0%	33.3%
Delivery/labour room with bed and lighting	50.0%	40.0%	0%
Post-delivery room	100%	50.0%	0%
Refuse disposal with cover	50.0%	10.0%	0%
Emergency light/lamp	75.0%	10.0%	11.1%
Generator set	100%	40.0%	44.4%
Refrigerator	50.0%	70.0%	44.4%
Running water supply	100%	10.0%	11.1%
Telephone or radio transmitter	100%	20.0%	22.2%
Operating theatre with basic infrastructure	100%	0%	0%
Delivery register or log book	100%	20.0%	66.7%
Antenatal care register or log book	100%	50.0%	88.9%
Family planning register	100%	100.0%	100.0%
Morbidity register	100%	70.0%	66.7%

The physical infrastructures of the hospital were not completely satisfactory if its summed up for 6 hospitals. There were only 16.7% of the hospital equipped with refuse disposal with cover. And there were only 33.33% of them were equipped with a Standard Operating Procedure (SOP), a flow chart, and a generator set. In

fact, all other physical infrastructure was not in satisfactory condition in every hospital. Only around 50% to 83.3% hospital were equipped with satisfactory infrastructure. But then if Marabahan General hospital and Delivery clinics (Rumah Bersalin) were pulled out, the results seem better and comparable between hospitals and PKM. Most of infrastructures in hospitals were adequate for maternal and child care.

2 Laboratory services

Laboratory services at PKM with bed had to be improved, because there were only 6 out of 11 types of test kit available in satisfactory condition. The highest number of PKM with bed equipped with such equipment only around 60%. PKM without bed, on the other hand, should improve the quality of their equipment, because the result of the laboratory test was necessary for making diagnosis in treating the disease or referring the patient to other health facilities.

Hospital could perform almost every type of test, but they should improve the quality of their laboratory services. Because there were only around 33.3% hospital equipped with satisfactory laboratory services for tests such as syphilis, HIV, hepatitis B, pap-smear and ketone.

Table 6 shows the percentage of hospital, PKM with bed and PKM without bed with satisfactory laboratory service.

Table 6 Laboratory services by type of clinics

<i>Laboratory services</i>	<i>Hospital (n=4)</i>	<i>PKM with bed (n=10)</i>	<i>PKM without bed(n=9)</i>
Pregnancy test kits	100%	30.0%	44.4%
HIV test kits	50.0%	0%	0%
Syphilis test kits	25.0%	0%	0%
Gram stain for Gonorrhoea	50.0%	60.0%	77.8%
Culture & sensitivity test	0%	0%	0%
Hepatitis B screening test	50.0%	0%	0%
Pap-smear test	75%	0%	0%
White blood cell count test	100%	50.0%	88.9%
Hemoglobin test	100.0%	60.0%	88.9%
Urine Protein test	100%	60.0%	100.0%
Glucose test	100%	60.0%	100.0%
Ketone test	25.0%	10.0%	0%
Malaria smear test	100%	60.0%	77.8%

Due to extreme situation (very poor infrastructures and equipment) of Marabahan GH and Rumah Bersalin, then the findings at those two clinics were

pulled out once again from the statistics counting Table 6 shows that laboratory services in hospitals were far better than other clinics (PKM with or without bed)

3 Medical equipment

Around 10% - 60% of PKM with bed equiped with almost every basic delivery and neonatal equipment, except delivery forceps, blanket to wrap baby and cesarean section set Even there was 10% of PKM with bed equiped with blood transfusion sets This meant that cases with hemorrhage could be dealt with at this facility

Table 7 Basic medical equipment by type of clinics

<i>Basic equipment</i>	<i>Hospital</i>	<i>PKM with bed</i>	<i>PKM without bed</i>
Wide mouth bottle (2)	100 0%	30 0%	11 1%
Blood pressure apparatus	100 0%	60 0%	55 6%
Infant weighing scale	100 0%	60 0%	77 8%
Stethoscope (Duplex)	100 0%	60 0%	66 7%
Fetal stethoscope	100 0%	60 0%	66 7%
Container to hold sterile instruments	100 0%	30 0%	55 6%
Sterilizer	83 3%	40 0%	55 6%
Spring type dressing sponge forceps	100 0%	60 0%	55 6%
Amniotomy tool	83 3%	30 0%	33 3%
Korentang	100 0%	60 0%	66 7%
Kelly clamp	100 0%	60 0%	66 7%
Kidney basin	100 0%	60 0%	77 8%
Deep bowl	100 0%	60 0%	77 8%
Gauze bowls	100 0%	60 0%	66 7%
Instrument tray	100 0%	30 0%	33 3%
Litmus paper	33 3%	20 0%	22 2%
Clinical oral thermometer	83 3%	30 0%	55 6%
Oxygen cylinder with related apparatus	100 0%	40 0%	0%
Adult ambu bag and mask	50 0%	50 0	11 1%
Means to measure hemoglobin	83 3%	70 0%	55 6%
Hemometer	50 0%	20 0%	44 4%
Protective clothing Apron	83 3%	10 0%	22 2%
Covering for feet	0%	0%	0%
covering for eyes	0%	0%	0%
Clock	100 0%	30 0%	44 4%

Most consumable supplies were available at PKM with bed and without bed, although the amounts were not always adequate

Table 8 shows hospital, PKM with bed and PKM without bed with satisfactory absolute minimum equipment for assisted delivery

Table 8 Minimum equipment for delivery

<i>Equipment</i>	<i>Hospital</i>	<i>PKM with bed</i>	<i>PKM without bed</i>
Scissors Epistotomy	83 3%	60 0%	55 6%
Cord	100 0%	60 0%	66 7%
Suture	100 0%	60 0%	66 7%
Suture needles	83 3%	30 0%	44 4%
Catgut	83 3%	30 0%	33 3%
Needle holder	83 3%	60 0%	55 6%
Hemostat (Artery)	100 0%	60 0%	66 7%
Kocher	83 3%	60 0%	66 7%
Pinset Anatomies	100 0%	60 0%	77 8%
Pinset surgery (Chirurgie)	100 0%	60 0%	55 6%
Direct light source	100 0%	60 0%	55 6%

Table 9 shows hospital, PKM with bed and PKM without bed with satisfactory equipment (other delivery, care of neonatal, uterine curetage, IUD, Norplant, Cesarean set)

Table 9 Other obgyn and gynecology equipment

<i>Equipment</i>	<i>Hospital</i>	<i>PKM with bed</i>	<i>PKM without bed</i>
Speculum	83 3%	60 0%	66 7%
Vacuum extractor	83 3%	10 0%	0%
Outlet (head)	83 3%	60 0%	22 2%
Midcavity	50 0%	0%	0%
Breech (piper)	50 0%	0%	0%
Cloth or towel to dry baby	50 0%	0%	0%
Blanket to wrap baby	50 0%	0%	0%
Ambu bag and mask for neonatal resuscitation	33 3%	30 0%	11 1%
Bulb	16 7%	10 0%	0%
DeLee	100 0%	30 0%	44 4%
Laryngoscope-Infant	16 7%	10 0%	0%
Endotracheal Tube	16 7%	10 0%	0%
Heat lamp or warming bed	83 3%	40 0%	0%
Equipment for uterine curetage	83 3%	30 0%	55 6%
IUD Kit	100 0%	50 0%	77 8%
Norplant Kit	100 0%	50 0%	77 8%
Cesarean Section Kit	83 3%	0%	0%

Table 10 shows hospital, PKM with bed and PKM without bed with satisfactory consumable supplies

Table 10 Consumable supplies by type of clinics

<i>Consumable supplies</i>	<i>Hospital</i>	<i>PKM with bed</i>	<i>PKM without bed</i>
Hand brush	16 7%	0%	0%
Soap box	16 7%	20 0%	33 3%
Glove sterile	16 7%	20 0%	33 3%
Unsterile	16 7%	20 0%	33 3%
Urethral catheter	16 7%	20 0%	33 3%
Syringes & needles non-disposable	16 7%	20 0%	44 4%
Syringes & needles disposable	16 7%	20 0%	33 3%
Sterile drapes	16 7%	0%	11 1%
Plastic sheeting	16 7%	20 0%	33 3%
Cotton	16 7%	20 0%	44 4%
Gauze/dressings/adhesive plaster	16 7%	20 0%	33 3%
Vaginal tampon	16 7%	20 0%	33 3%
IV kit	16 7%	20 0%	33 3%
Tape measure	16 7%	20 0%	33 3%
Sanitary pads	16 7%	0%	0%
Blank Labourgraphs or Partographs	0%	0%	0%
Blank antenatal client card or Maternal record	16 7%	10 0%	33 3%
Sterile cord ties	16 7%	20 0%	11 1%
Blood giving sets	16 7%	10 0%	0%

4 Educational materials

Educational materials were available at hospital, PKM with and without bed. Even posters and leaflets on HIV/AIDS with satisfactory condition were available more at PKM with and without bed than the hospital. There are a lot more hospital and PKM with bed with posters and leaflets that were seen at the facilities, but the conditions were not satisfactory.

Table 11 shows hospital, PKM with bed and PKM without bed with satisfactory and seen educational materials

Table 11 Educational materials by type of clinics

<i>Educational materials</i>	<i>Hospital</i>		<i>PKM with bed</i>		<i>PKM without bed</i>	
	Satisf	Seen	Satisf	Seen	Satisf	Seen
on warning signs of complications in pregnancy	16 7%	50 0%	20 0%	80 0%	22 2%	33 3%
on antenatal nutrition (anemia)	16 7%	66 7%	10 0%	80 0%	22 2%	22 2%
on nutrition	16 7%	83 3%	20 0%	80 0%	33 3%	55 6%
on postpartum care/newborn care/breast-feeding	16 7%	83 3%	20 0%	70 0%	33 3%	22 2%
on family planning	16 7%	83 3%	20 0%	80 0%	44 4%	55 6%
on STD and/or HIV/AIDS	16 7%	66 7%	20 0%	80 0%	33 3%	44 4%

5 Drugs and Supplies

PKM with and without bed almost equipped with all types of drugs that were needed for maternal cases including intravenous solutions (PKM with bed 90% - 100% and PKM without bed 66 6% - 100%) and oxytocin (PKM with bed 100% and PKM without bed 88 9%) But the hospitals were more fully equipped with all types of drugs than PKM with and without bed Almost every hospital owned all types of drugs and supplies

Drugs and supplies for family planning were available at the range of 16 7% - 100% hospital in which only 16 7% hospital equipped with diaphragms and all hospitals equipped with depo provera Meanwhile, PKM with and without bed were better equipped with those drugs and supplies All PKM with bed were equipped with almost every drugs and supplies for family planning, except only 10%, 20% and 80% of them equipped with diaphragms, progesterone and combined oral contraceptives low oestrogen respectively However, around 22 2% up to 100% PKM without bed were supplied with drugs and supplies for family planning

4 3 The system and quality of recording/registering

1 Delivery and hospital registry

Record of number of delivery, health care provider who assisted the delivery and types of delivery at the hospital were relatively adequate Only 16 7% hospital did not have any delivery registry Meanwhile, all PKM with and without bed had delivery registry Only one out of six hospitals did not keep a complete record on types of delivery There was a possibility that this hospital was a private hospital

Similar condition existed with registry on maternal complication There was one hospital did not have it Meanwhile, all PKM with and without bed held

registry on maternal complication. The registration was essential as a base for referring patients to the hospital.

Table 12 shows means of number of deliveries and types of delivery at the hospital, PKM with bed and PKM without bed.

Table 12 Delivery registry by type of clinics

<i>Delivery registry</i>	<i>Hospital (n=5)</i>	<i>PKM with bed (n=10)</i>	<i>PKM without bed(n=9)</i>
Number of delivery total in the past 12 months	440.40	35.60	00
Number of delivery by Midwife	318.60	18.40	00
Number of delivery by physician	137.40	4.90	00
Normal vaginal delivery	307.80	35.20	00
Instrument delivery	80.80	50	00
Abnormal vaginal deliveries	25.20	30	00
Caesarean sections	56.00	00	00

2 Maternal complications

Table 13 shows means of maternal complications at hospital, PKM with bed and PKM without bed.

Table 13 Number of maternal complications

<i>Maternal complications</i>	<i>Hospital (n=5)</i>	<i>PKM with bed (n=10)</i>	<i>PKM without bed(n=9)</i>
Hemorrhage antepartum	32.60	80	33
Postpartum hemorrhage	28.60	2.90	00
Obstructed labor	40.80	1.10	00
Prolonged labor	11.00	2.80	00
Sepsis	1.20	80	00
Pre-eclampsia	7.40	60	11
Eclampsia	8.00	60	11
Pre term labor	11.40	60	00
Other	33.40	2.80	00

The maternal complications which mostly referred to the hospital were obstructed labor (M = 40.80), hemorrhage antepartum (M = 32.60) and postpartum hemorrhage (M = 28.60). Meanwhile, mean number of maternal complications cases dealt with at PKM was around 2.90 at the most. It was a relatively small number compared to the hospital.

3 Neonatal complications

The main neonatal complication that was dealt with at the hospital was low birth weight (M = 69.25). However, no more than 2 cases of neonatal complications were reported at the PKM (with and without bed). Neonatal deaths

were reportedly higher than maternal deaths at the three types of health facilities Table 14 shows means of neonatal complications and deaths at hospital, PKM with bed and PKM without bed

Table 14 Neonatal complications by type of clinics

<i>Neonatal complications and deaths</i>	<i>Hospital (n=4)</i>	<i>PKM with bed (n=10)</i>	<i>PKM without bed (n=9)</i>
Asphyxia	2 25	30	00
Low birth weight	69 25	50	00
Birth trauma	00	00	00
Infection	1 50	00	00
Other	1 00	10	00
Maternal deaths	6 50	90	33
Fresh still birth	5 50	1 40	00
Macerated still birth	7 50	10	00
Neonatal deaths	20 50	50	22

4 Family planning register

A certain employee who's in charge of the register besides Bidan who worked at PKM or the hospital completed registration of family planning There were three out of six hospitals and nine out of ten PKM with bed, which completed the register But all nine PKM without bed completed the register Table 15 shows means of users of various contraceptive methods at hospital, PKM with bed and PKM without bed

Table 15 Contraceptive methods chosen by pregnant mothers

<i>Contraceptive methods</i>	<i>Hospital (n=3)</i>	<i>PKM with bed (n=9)</i>	<i>PKM without bed (n=9)</i>
Oral contraceptives/pills	45 33	366 44	289 22
Injectable	61 33	240 11	111 33
Condoms	13 00	5 00	2 33
Diaphragms	33	00	00
IUCD/IUD	5 67	14 22	7 67
Subdermal implants Norplant	9 33	69 78	18 33
Spermicide	5 33	56	11
Sterilization female	7 33	1 11	1 00
Sterilization male	00	00	00

5 Antenatal care record review (ANC)

The study showed that the frequency of ANC was relatively high, i e six, four and five antenatal care visits at the hospital, PKM with bed and PKM without bed respectively The quality of records was varied At the hospital, for example, the record of proteinuria (urine analysis tests) was as low as 8 9% and the record of

haemoglobin tests were 6.7%. Whereas, record of the number of times the patient had been pregnant (gravida) was as high as 86.7%. Meanwhile, PKM with bed kept better record, with the range of 40% to 90%. Table 16 shows antenatal care record review at the hospital, PKM with bed and PKM without bed

Table 16 ANC visits by type of clinics

<i>Means</i>	<i>Hospital</i>	<i>PKM with bed</i>	<i>PKM without bed</i>
Number of antenatal care visits	5.66	4.44	5.16
Fundal height in weeks at first ANC visit	17.46	22.62	16.64
Number of blood pressure reading	5.11	3.94	4.86
Proteinuria	1.00	1.25	1.08

Table 17 shows frequency distribution of antenatal care record review at the hospital, PKM with bed and PKM without bed

Table 17 ANC record review by type of clinics

<i>Antenatal care record review</i>	<i>Hospital</i>	<i>PKM with bed</i>	<i>PKM without bed</i>
Antenatal care visits	97.8%	90.0%	97.2%
Fundal height in weeks at first ANC visit	82.2%	52.7%	65.3%
Blood pressure reading	97.8%	90.0%	97.2%
Proteinuria	8.9%	7.3%	18.1%
Tetanus toxoid	35.6%	69.1%	94.4%
Gravida	86.7%	80.0%	84.7%
Date/result of haemoglobin test	6.7%	40.0%	43.1%
Women with low haemoglobin receive treatment	22.2%	58.2%	58.3%
Date/result of syphilis test	0%	0%	0%
Women with positive syphilis receive treatment	22.2%	54.5%	41.7%
Supplementation with iron	51.1%	65.5%	75.0%
Provision of malaria treatment	0%	0%	0%

6 Normal delivery (partograph) review

Almost every hospital provided the partograph. Unfortunately, not all health care provider had the ability to fill it adequately. Health care providers at PKM without bed had no record what so ever on the number of vaginal examination, fetal heartbeat and blood pressure. Meanwhile, the records of the number of vaginal examination, number of fetal heartbeat and blood pressure at the hospital and PKM with bed, for example, were relatively high. Table 18 shows the

percentage of normal delivery (partograph) review at the hospital, PKM with bed and PKM without bed

Table 18 Percentage of normal deliveries

<i>Normal delivery (partograph)</i>	<i>Hospital</i>	<i>PKM with bed</i>	<i>PKM without bed</i>
Vaginal exams	92.9%	71.4%	0%
Fetal heartbeat	85.7%	60.7%	0%
Blood pressure	95.2%	71.4%	0%
Birth weight	95.2%	50.0%	0%
Assessment of the condition of the baby	83.3%	57.1%	0%
Antenatal care	31.0%	7.1%	0%

7 Record of management of complicated delivery

Similar to that of other records, record of management of complicated delivery were incomplete. Management of pre-eclampsia and eclampsia at the hospital were not recorded adequately. Only 48.9% administration of antihypertensive medication was being recorded. Meanwhile, only 57.8% eclampsia or eclamptic fits were being recorded. Whereas, record of blood pressure and fetal heartbeat checked hourly were as low as 17.8% and 11.1% respectively. Diastolic blood pressure equal to or greater than 100 mmHg, which was one of the most essential records, was not entirely recorded.

Haemorrhage management at the hospital was recorded at the range of 6.7% - 86.7%, which were not adequate and should be improved.

In the case of obstructed labour/partograph, there were relatively low records on the referrals, descent static and strong contractions for more than three hours at the three facilities. Table 19 shows the percentage of complicated delivery records pre-eclampsia and eclampsia management at the hospital, PKM with bed and PKM without bed.

Table 19 Percentage of complicated deliveries

<i>Pre-eclampsia & eclampsia management being recorded</i>	<i>Hospital</i>	<i>PKM with bed</i>	<i>PKM without bed</i>
Diastolic blood pressure	91.1%	57.1%	0%
Administration of antihypertensive medication	48.9%	19.0%	0%
Eclampsia or eclamptic fits	57.8%	28.6%	0%
Administration of sedative or anticonvulsive medication	93.3%	33.3%	0%
Blood pressure checked hourly	17.8%	0%	0%
Fetal heartbeat checked hourly	11.1%	0%	0%

Table 20 shows the percentage of complicated delivery records haemorrhage management at the hospital, PKM with bed and PKM without bed

Table 20 Recorded of harmorrhage management

<i>Haemorrhage management being recorded</i>	<i>Hospital</i>	<i>PKM with bed</i>	<i>PKM without bed</i>
Blood loss	13 3%	0%	0%
Response time	56 7%	44 4%	11 1%
Administration of volume fluid replacement	76 7%	77 8%	11 1%
Signs and symptoms of shock	83 3%	74 1%	11 1%
Cause of blood loss	73 3%	74 1%	11 1%
Placenta removed manually	46 7%	66 7%	11 1%
Oxytocin given	86 7%	33 3%	11 1%
Bimanual uterine compression	6 7%	0%	0%
Blood transfusion	70 0%	3 7%	11 1%
Laceration/tear sutured	3 3%	3 7%	0%

Table 21 shows the percentage of complicated delivery records obstructed labour (partograph) at the hospital, PKM with bed and PKM without bed

Table 21 Obstructed labour by type of clinics

<i>Obstructed labour being recorded</i>	<i>Hospital</i>	<i>PKM with bed</i>	<i>PKM without bed</i>
Patients referred from another health facility	64 5%	38 1%	31 6%
Descent static	38 7%	9 5%	5 3%
Strong constriction recorded for more than 3 hours	45 2%	0%	36 8%

It's a logical situation of higher number of obstructed labour in hospital compared to PKM with or without bed. The good sign was that PKM with bed have had more obstructed labour than PKM without bed. This could be meant PKM with bed have started its function to be the first referral maternal clinic in rural (remote area) health setting.

V CONCLUSION AND RECOMMENDATION

1 Conclusion

- a Management and facilities at PKM with bed were adequately prepared to handle maternal and neonatal cases

- b Physical infrastructure and equipment at PKM with bed and hospital were adequate to manage maternal and neonatal cases
- c Although detail record on input, process and output were essential for assessing the quality of services to the mothers and their baby, in fact, they were incomplete
- d There was insufficient amount of endowment fund to run the blood transfusion centre at the province

2 Recommendation

- a There is a demand for continuous improvement on PKM with bed and PKM without bed in their ability to handle maternal cases. Whereas, the hospital need to acquire a regular and a clear standard operating procedure (SOP) in managing maternal cases. There is also a necessity for providing high skilled human resources by executing a regular training program on obstetric surgery cases, which were frequently referred to the hospital
- b Periodic inventory reviews on supplies and equipment is essential for restoration. There is a demand for an employee who's in charge of regular inspections on medical equipment
- c Recording and registration have to be improved, especially in recording detailed process of managing maternal cases. However, the forms for registration is adequate and sufficient
- d The ability to manage blood transfusion at the hospital at kabupaten and several PKM with bed which handle haemorrhage cases have to be improved immediately. Workload of blood transfusion center to handle all blood transfusion for the whole province of South Kalimantan should be distributed into at least three blood transfusion centers spreading throughout the province