

## **PREGNANCY CARE OF MRS. E G<sub>1</sub>P<sub>0</sub>A<sub>0</sub> WITH EXPOSURE CIGARETTE SMOKE IN THE FAMILY ENVIRONMENT IN SUKA NEGERI, SOUTH BENGKULU**

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### **Abstract**

Many Indonesian are exposed to passive smoke because 91.8% of smokers smoke at home. Carbon monoxide from cigarettes that are inhaled by pregnant women will be carried into the mother's bloodstream. The CO element binds with Hb to produce (COHb), where carboxyhemoglobin cannot carry O<sub>2</sub> so it limits the release of O<sub>2</sub> to the tissues, and can cause hypoxia in the fetus. As an input for the midwife profession in the effort to provide pregnancy services with exposure to cigarette smoke in the family environment, so as to provide professional midwifery services and in accordance with the midwifery code of ethics. Type of case study using qualitative approach method, location in village suka negeri of south bengkulu district, in Mrs.E, data collection technique was using primary and secondary data, research instrument was using interview guidance and data analysis used SOAP method. After five-days visit the general condition of the mother was good, vital signs were normal and mother was not exposed to cigarette smoke again. Pregnancy care in Mrs.E G<sub>1</sub>P<sub>0</sub>A<sub>0</sub> with exposure cigarette smoke in the family environment has been done in accordance with the SOAP method.

**Keywords: Pregnancy Care, Cigarette Smoke Exposure, Family Environment**

### **1. INTRODUCTION**

The number of smokers in Indonesia increases every year. According to the World Health Organization (WHO), Indonesia ranks third highest after China and India in the number of adult smokers [1]. The average proportion of current smokers in Indonesia is 35%. In Indonesia, around 65.6 million women and 43 million children are exposed to cigarette smoke or become passive smokers. Many Indonesians are exposed to cigarette smoke because 91.8% of smokers smoke at home [2].

According to the facts of Indonesian Tobacco, it is estimated that 5% of women in Indonesia smoke. In addition to being an active smoker, it turns out that far more women become passive smokers. An estimated 65.6 million women and 43 million children in Indonesia are exposed to cigarette smoke. This happens because 91% of smokers smoke at home, not far from their wives and children. In fact, the dangers of passive smoking are the same as active smokers [3]. The current proportion of smokers in Indonesia is 16 times higher for men (65.9%) compared to women (4.2%). In Indonesia, around 65.6 million women and 43 million children are exposed to cigarette smoke or become passive smokers. Many Indonesians are exposed to cigarette smoke because 91.8% of smokers smoke at home [4].

Research in the 2013, related to cigarette smoke exposure was conducted in Banjarbaru General Hospital, most of the respondents were passive smokers, 42 people (67.4%) and there were also active smokers as many as 3 people (3.4 %) [5]. Data obtained from the results of the study that the passive smokers were most exposed to cigarette smoke by their husbands who smoked at home while being together and close to their mothers during pregnancy. Even besides husbands, pregnant

women are also exposed to family members at home, neighbors and coworkers. These pregnant women are exposed to cigarette smoke almost every day [6].

Carbon monoxide from cigarettes sucked by pregnant women will be carried into the mother's bloodstream. Carbon monoxide in the blood will compete with oxygen to bind to hemoglobin. Carbon monoxide binds 200 times stronger in hemoglobin compared to O<sub>2</sub>, so O<sub>2</sub> which is bound to hemoglobin decreases and causes reduced O<sub>2</sub> levels in the mother's blood. The CO element binds to Hb to produce (COHb), where carboxyemoglobin cannot carry O<sub>2</sub> so that it limits the release of O<sub>2</sub> to the tissue, and can cause hypoxia in the fetus. Hypoxia in the fetus and decreased umbilical blood flow reduce the acceptance of infant nutrition so that it can cause growth disturbances in the fetus, causing low birth weight (LBW) [7].

Aim of the research was to be able to carry out and improve the ability of the author in conducting pregnancy care counseling in pregnant women with exposure to cigarette smoke in the family environment according to midwifery management theory applied in midwifery care with the SOAP method.

Benefits of the research was

a. Theoretical benefits

Can add knowledge to researchers about the influence of pregnancy by exposure to cigarette smoke in the family environment, the results of this study can be used as input in the development of subsequent research.

b. Practical Benefits

1) For the profession

As an input to the midwife profession in efforts to service pregnancy by exposure to cigarette smoke in the family environment, so that it can provide midwifery services professionally and in accordance with the midwifery code of ethics.

2) For Institutions

It is hoped that it will be useful as an input for institutions, especially the midwifery department to improve students' insight into pregnancy care by exposure to cigarette smoke in the family environment.

## **2. METHODS**

The type of case study uses a qualitative approach, the location in village suka negeri of South Bengkulu, the subject of Mrs.E research, data collection techniques using primary and secondary data, research instruments using interview guidelines and data analysis that will SOAP method is used.

## **3. RESULTS AND DISCUSSION**

From the care for five days the results showed that the husband tried to stop smoking, the mother was not exposed to cigarette smoke.

In this chapter the author discusses the gap between case management and the concept described in chapter II, because the author uses midwifery care according to SOAP, which consists of four steps, namely subjective, objective, data analysis and planning. The sequence is as follows:

a. Subjective data

There are two types of cigarette smoke that interfere with health, namely mainstream smoke, namely:

1) Smoke that is smoked by electricity and side streams

2) The smoke that is burning from the tip of the cigarette then spreads into the air

Thus the suction of side smoke has a higher risk of suffering from health problems due to smoking. Passive smoking has a fairly high risk of lung cancer, coronary heart disease and respiratory problems [8].

In the Mrs.E G<sub>1</sub>P<sub>0</sub>A<sub>0</sub> study with pregnancies exposed to secondhand smoke obtained subjective husband smoking data near the mother and mother said there was no history of any diseases such as heart disease, high blood pressure, asthma and tuberculosis. So in the study there is a gap between theory and practice in the field, because in the theory of passive smoking has a risk of lung cancer, coronary heart disease and respiratory problems. Whereas in the field mothers are passive smokers and do not suffer such as heart disease, high blood pressure, asthma and tuberculosis.

b. Objective data

The effect of cigarette smoke on the fetus can cause LBW (Low Birth Weight), pregnant women exposed to cigarette smoke have a negative influence on the condition of the fetus they contain. Cigarette smoke can inhibit fetal growth and development [9].

Table of weight gain during pregnancy

	10	20	30	40
Tissue and liquid	wee k s	w e k s	w e k s	w e k s
Fetus	5	300	150 0	340 0

Quoted from [10]

Objective data collection is carried out by direct observation and physical examination, fetal weight interpretation results obtained are  $(23-12) \times 160 = 1760$  grams, at the age of 26-27 weeks pregnant the normal limit is 1001 grams.

So in the assessment there is no gap between theory and practice in the field, because in theory the influence of cigarette smoke on the fetus can cause LBW. Whereas in the fetal weight interpretation is 1760 grams within normal limits.

c. Assessment

The negative effects of smoking and smoke on pregnant women include the threat of premature labor, premature rupture of the membranes, the threat of placental pre-birth, and placenta previa [11].

In this case the author obtained a midwifery diagnosis. Mrs. E 28 years old G<sub>1</sub>P<sub>0</sub>A<sub>0</sub> is 26 weeks 4 days pregnant, single fetus, intra-uterine life, presentation of head with normal pregnancy exposed to cigarette smoke in the family environment, the problem found in Mrs.E pregnant women is that pregnant women are exposed to cigarette smoke. The needs provided are in the form of providing counseling about the impact of smoking on pregnancy to the mother and husband. Potential problems that will occur are the threat of preterm labor, KPD, the risk of miscarriage, and low birth weight. Immediate action only provides counseling about normal pregnancy and to remain unexposed to cigarette smoke. So in the study there is a gap between theory and practice in the field, because in the theory of the negative impact of smoking and smoke on pregnant women including the threat of premature labor, premature rupture of the membranes, the threat of placental pre-birth, and placenta previa. While in the field the threat of

placental loss before birth, and placenta previa does not occur because there is no bleeding in the advanced pregnancy experienced by the mother.

d. Planning

Planning is a plan of action to be carried out based on analysis. Planning describes the documentation of planning and evaluation based on assessment [12].

The most toxic chemicals in cigarettes are as follows: Nicotine, Tar, and carbon Monoxide [13]. The negative effects of smoking and smoke on pregnant women include the threat of premature labor, premature rupture of the membranes, the threat of placental pre-birth, and placenta previa [14].

In this case it was carried out in accordance with the plan that had been made such as:

- 1) Explain to the mother the toxic chemicals contained in cigarettes such as Nicotine, Tar, and carbon Monoxide.
- 2) Explain to the mother that the consequences of exposure to cigarette smoke in pregnancy can cause, among other things, the threat of premature labor, premature rupture of the membranes, the threat of preterm labor, premature rupture of membranes, the risk of miscarriage, and LBW.

So in planning there is no gap between theory and practice in the field, because in theory there are toxic chemicals in cigarettes which are mainly as follows: Nicotine, Tar, and Carbon Monoxide. The negative effects of smoking and smoke on pregnant women include the threat of premature labor, premature rupture of the membranes, the threat of placental pre-birth, and placenta previa. While in the field researchers also explained about toxic chemicals in cigarettes and the negative impact of cigarettes or cigarette smoke on pregnant women.

#### 4. CONCLUSION

- a. Subjective data obtained from interviews with patients, namely mothers' husbands, are heavy smokers, often smoke near mothers inside the house so that mothers and families are exposed to cigarette smoke.
- b. Objective data showed no signs of the impact of exposure to cigarette smoke on maternal pregnancy.
- c. Obstetric diagnosis Mrs. E 28 years old G<sub>1</sub>P<sub>0</sub>A<sub>0</sub> is 26 weeks 4 days pregnant, single fetus, alive, intra-uterine, presentation of head with normal pregnancy exposed to cigarette smoke in the family environment. The problem found in Ny.E is that pregnant women are exposed to cigarette smoke in their husbands. The appropriate needs are in the form of providing counseling about the impact of smoking on pregnancy. Potential problems are the threat of preterm labor, premature rupture of membranes, the risk of miscarriage, and low birth weight. While immediate action provides counseling to prevent the effects of smoking on pregnancy.
- d. Plannig is done for five days the results of which are changed by the husband about smoking and trying to stop smoking, the mother is not exposed to cigarette smoke.

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