Adil Muhammad

Id # 13659

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Paper: Research Methodology

**Q1. Answer**

1. **Step of the research process**.
2. **Formulation the research problem**:

* At the first starting the research some steps are very necessary.
* First we study the research problem we took and identify the area of the interest e.g. if a person who get the degree of the medical science .so it’s necessary to do research on neither medical science nor other field because they know well all about the medical science. After the area of interest divided into sub area. It means that medical vast subject we should to take specific part on the medical science for the research.

Purpose of research:

* The main purpose to set framework for your search and good problem formulation is essential for completing god study.
* To identify the objective review.

1. **Review of research:**

* Define problem briefly
* After choice the research problem and research topic we study the literature related to the previous problem such as internet books journals, publish,article.these all the sources we study to know about the selected topic to how much work done before our researching.

Purpose of research

* The main purpose of the review of literature to got suitable and more knowledge about the researches problem.
* To clear himself about the topic.
* To help and improve the method by which we doing our research.
* It reduces the duplicating of the data.

1. **Formulating hypothesis:**

* Hypothesis is an idea for the problem which has not necessary yet been proved to correct.
* Hypothesis allows us to determine through research if our theory is correct. Some idea which we takes from the different place for information but its not been correct .somewhere it will be correct but in some condition its will not.
* Assumption of certain phenomena.

Purpose of formulating hypothesis:

* Be testable
* Be clear and understand

1. Preparation of research design:

* Research design is defined as plane, structure, and elaborates of investigation to get answer of research question.
* In the preparation of research design we study which topic is collect for information and which source are used for idea.

Main purpose:

* To control the change of the research if we get out design. The research so there is many chance to come big chances.
* Help to understand to the reader what follow and how to follow them.

1. **Data collection:**

* It is a process in which collect the information from related source.
* There are many sources to collect the relevant data about the research topic.
* For the collection of primary data may way and method are used to see and such as present intervieous, observation question etc.
* Secondary data: it’s collect from the different source used for other purpose than your research.

Purpose of data collection:

* It’s important for quality improvement.
* It necessary when the present data are not sufficient.

**Step B:**

**Literature review:**

Miscarriage is the condition when the embryo death occurs before the 20th week. A pregnancy , Mostly occur in the first 8 month of pregnancy about 87% women who suffered miscarriage commonly give birth to normal health child. (Thomas Antony, Gynecologist, CM hospital us)

The miscarriage may cause due to chromosomal abnormalities that include blighted ovum as a result no embryo are producing. The intrauterine fetal demise initially the embryo formed but do not mature into fetus, the fetal death occur before the symptom of pregnancy appeared. The molar pregnancy a known cancerous tumor develops in the uterus .that causing cyst masses in uterus leads to lose of the pregnancy. The risk factor that increase the risk of the miscarriage are age more than 35 years of age women have 20% chances of miscarriage. The chronic illness such as uncontrolled diabetes infection disease like brucellosis and toxoplasmosis..Women who are overweight or underweight are also at high risk of miscarriage some test that, such as invasive prenatal test performed for chronic villas and amniocentesis can lead to cause miscarriage. Women who have one miscarriage have no chances to miscarriage again, there is only 1% women who are suffering from recurrent miscarriage (Dr Kaylen Silverberg, fertility specialist)

According to the research conducted from ten women after miscarriage. The research was conducted through interview which proves that the physical and emotional pain transformed marital relationship and traumatic incidence were the causes of baby death in the fetus. ( Syeda shahida batoo , government college university Lahore , September 2016)

* According to estimation in 2012-2013 there are 20% of fetal deaths as due to un intended pregnancy and increase the level of abortion were the main reason of miscarriage. The abortion rate are slowly rise up to 30 to 35% from 2013 due to use oral contraceptive (mysoprostol).
* The Estimation of abortion related mortality in Pakistan were taken by health professional survey in 2002. Analyze 890,000 increase abortion occurring per year in Pakistan .they estimated that 29 women per 1000 with the age of 15 to 49 performed abortion. they also estimate that 1 Lac 97000 women are hospitalized due to higher abortion complication ( Zeba Asathar , Susheela Singh , Fariyal F-Fikree )
* The progesterone has affect in the treatment of miscarriage but it may have no effect in the rate of preterm birth , the abnormalities which expose after the birth is not definite ( Hayfaa A wahabi , Samia A esmail)
* The maternal hormonal changes immunity in the embryo maturation processes could be normal involved but the increase level of natural killer cell have great impact on the fatal development , adherence the endometrium of the uterus that is associated with miscarriage. ( Sesh kamal sunkara 2013)
* According to the article new England , journals of the medicine diagnosing to the following condition , less than 7mm crown-rump, 16 to 24 mm gestational sac with no embryo, the heart beat least for 2 weeks with no embryo appear in the ultrasound , the absence of embryo with at least 11 days heart beat the ultrasound scan show the gestational sac with yolk sac. (New England journals).
* A survey on 156 recurrent miscarriage women who have been treated by immune therapy about 112 women had give birth normal healthy child after the treatment. (Book early pregnancy loss)

(Mechanism and treatment) .

* Six weeks of amenorrhea with positive pregnancy diagnosis after regular menstrual cycles , show that its early pregnancy at this condition when the slight bleeding starts it’s the sign of miscarriage.
* Clinically recognize pregnancy loss is common occurring in 15 to 25% of the women , 15% of all recognizes pregnancy of more than 40 years of age are more high risk for miscarriage.
* Recurrent pregnancy loss caused in 1017 women in which 31% was occurred without any major abnormalities.
* The excessive use of aspirin and painkillers like ibuprofen, naproxen, piroxicam etc… are also causing a high risk for fetal death(miscarriage). About 4,705 miscarriage cases were reported in which 7.5% were caused by the use of NSAIDs (Non-Steroid-Anti-Inflammatory-Drugs) According to the senior researcher Aneik Berard of the University of Montréal’s CHU Sainte Justine Research center.

**References**

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Book, ***The early pregnancy loss mechanism and treatment***