

Worldwide Prevalence and Incidence of Ectopic Pregnancy

A Protocol For A Systematic Review

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Outline

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DEFINITION

- Pregnancy in which the implantation of the fertilised egg occurs outside the uterine cavity, most frequently in the fallopian tube.

BACKGROUND

EP should be considered a relevant public health indicator

- Presents as an acute emergency and a life threatening event
- Providing an overall picture of the capacity of a health system to deal with the diagnosis and treatment of emergency situations



EP is a leading cause of maternal mortality and morbidity

- Responsible for thousands of hospital admissions, surgical interventions and blood transfusions.
- Accounts for a sizeable proportion of infertility and ectopic recurrence.
- Accounts for up to 10% of all maternal deaths.

Risk Factors

- Previous EP
- Previous tubal surgery and/or documented tubal pathology
- In utero diethylstilbestrol (DES) exposure
- Previous genital infections (PID, chlamydia, gonorrhoea)
- Lifetime sexual partner >1
- Current IUD usage
- Infertility
- Smoking

Ectopic Pregnancy



■ Infertility



■ Assisted
Reproductive
Technologies



The proportion of EP after IVF
ranges from 4% to 11%

As the number of ART attempts
steadily rises throughout the
world, all centers are confronted
with the problem of EP.

Difficulties in determination of worldwide EP prevalence and incidence

- Different denominators
- Underestimation
- Overestimation



- Variation in availability of medical surveillance resources
- Underdeclaration of patients who died due to EP before receiving a diagnosis and treatment
- Many reports have been based upon samples not representative of general population.

Different denominators

Due to individual definitions of the denominator reported, the incidence of EP has been expressed in various ways that are difficult to compare

Examples of reported incidence rates of EP

Region

Incidence rate

England-Wales

12.4/ 1000 reported pregnancy

Beijing-China

0.52/ 1000 women of reproductive age

Nigeria

1.68/ 100 total births

Ghana

4 %

Underestimation of EP;

- Spontaneous abortions
 - Chemical pregnancies
- } may represent self-resolving extra-uterine pregnancies

Overestimation of EP;

- Illegally terminated and unreported pregnancies

Why is it important to estimate EP incidence ?

- It is important to estimate the burden of the EP so that the planning of medical care and public health policies can be better informed.

OBJECTIVE

The information of worldwide EP incidences are widely dispersed in the literature and comparisons are difficult to make.

For this reason, we will conduct a systematic review to summarise all available information on the prevalence and incidence of EP.

METHODOLOGY

Study Design

- Any study design providing prevalence or incidence rates for EP in any population will be assessed.
- EP could be diagnosed by clinical or laboratory examination or self-reported.

Selection Criteria

- inclusion criteria
- exclusion criteria

Inclusion criteria;

- All relevant studies related with EP prevalence or incidence,
- In any language
- published from 1997 to 2002.

Exclusion criteria;

- Studies with no data,
- Studies with <200 participants,
- Studies without any source of data that can be traced,
- Studies referring to data collected from before 1990,
- Studies where no dates for data collection periods are available.

Type of participants

- Women who are pregnant or within 42 days of termination of pregnancy or women in reproductive age.

Type of outcome

- Ectopic pregnancy

Search strategy

- Electronic databases searching
- (Medline, Popline, Cochrane database of systematic reviews, Cochrane controlled trial register, Regional WHO online databases, etc.)
- Other electronic searching
- (Existing web pages from ministries of health in all countries, internet search)
- Hand and reference searching
- Personal contacts and specific strategies.

Description of studies

- A table with the characteristics of the included studies will be prepared containing the methods, participants and outcomes studied.
- This table will show the studies listed chronologically by year of publication and within each year the order will be alphabetical.

Methods of Review

- Reference manager bibliographic software will be used to store the studies.
- All identified studies according to the inclusion criteria will be evaluated initially by titles/abstracts (screening form).
- Following initial screening, full-texts of eligible studies will be evaluated.

SUMMARY

- EP is an important public health problem.
- The true extent of this problem is not known.
- The best way to determine the extent is a systematic review.

- This study aimed to develop a protocol to conduct a systematic review on incidence and prevalence of EP.