

Indoor Pollution and Its Effect on the Pregnancy
Outcome in Cluster
and Non Cluster Areas

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By
Sharbat Thabet Hassanein Atea
B.Sc. Nursing

Ain Shams University
Faculty of Nursing
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Supervised By

Prof. Dr. / Faten Khayrat El Guindi

Professor and Head of Community Health Nursing
Faculty of Nursing

Ain Shams University

Dr. / Magda Abd El Satter Ahmed

Lecturer of Community Health Nursing
Faculty of Nursing
Ain Shams University

Dr. / Safinaz Mohamed Said

Lecturer of Community Health Nursing
Faculty Of Nursing
Ain Shams University

Faculty of Nursing

Ain Shams University

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SUMMARY

Indoor pollution refers to abnormal changes in the physical, chemical, and biological characteristics of air in the indoor environment within a home, building, or an institution. Indoor air pollution is a concern in the developed countries, where energy efficiency improvements sometimes make houses relatively airtight, reducing ventilation and raising pollutant levels. Indoor pollution often caused by lead, carbon monoxide, nitrogen dioxide, radon, tobacco smoke, infectious agents, combustion product smoke (e.g. fireplaces, unvented kerosene or gas heaters & wood stoves), household chemicals and pesticides (PRIDE, 2004).

Indoor pollution sources that release gases or particles into the air are the primary cause of indoor air quality problems in the homes. Inadequate ventilation can increase indoor pollutant levels by not bringing in enough outdoor air to dilute emission from indoor sources and by not carrying indoor air pollutants out of the home. High temperature and humidity levels can also increase concentrations of some pollutants (Edlin, et al., 1998).

Concentrations of air pollution when biomass fuels wood, for example are burned are usually much higher indoors than outdoors. From a lot of studies, which included actual measurements of indoor air pollution, one researcher has estimated that there are 4.1 million deaths annually from acute respiratory illnesses in the developing countries. This compared with 3.0 million deaths from intestinal disease, and slowing lung growth as a result of indoor air pollution (Smith & Mehta, 2000).

The environment in which pregnant women live has a marked effect on the development of the fetus. The polluted environmental conditions of mothers have led to unusually high rates of preterm labor, spontaneous abortions, stillbirths, neonatal death, premature and congenital malformation in the neonates (EPA, 2005).

The present study was aiming at evaluating the effect of indoor pollution on pregnancy outcome in cluster and non cluster areas. This aim was achieved through, assessing the indoor environment, that affects on the pregnant women in cluster and non cluster areas, assessing knowledge and practices of the pregnant women regarding to indoor pollution, and assessing the health condition of the pregnant women and newborns in the cluster and non cluster areas .