

**THE EFFECT OF ALCOHOL AND NICOTINE
ON FERTILITY, PREGNANCY
AND DEVELOPMENT IN ALBINO MICE**

A Thesis Submitted
For
(Ph.D) Degree in Zoology

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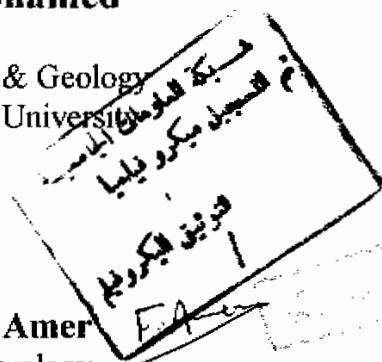
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To
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the 1990s, the number of people in the UK who are employed in the public sector has increased by 1.5 million, from 2.5 million in 1980 to 4 million in 1998 (Department of Health 1999). The number of people employed in the health service has increased by 1.2 million, from 1.8 million in 1980 to 3 million in 1998.

There is a growing emphasis on the need to improve the quality of care and services provided by the health service. This has led to a number of initiatives, including the introduction of clinical guidelines, the development of patient choice, and the implementation of quality assurance schemes.

The purpose of this paper is to review the literature on the effectiveness of patient choice in the health service. We will first consider the concept of patient choice, and then review the evidence on its effectiveness. We will then discuss the implications of the findings for the health service.

2. Choice

The concept of patient choice is often defined as the ability of patients to choose the type of care and services they receive. This can include the choice of hospital, the choice of doctor, and the choice of treatment.

There are a number of factors that can influence patient choice. These include the availability of services, the quality of care, and the cost of care. Patients may also choose to receive care in a particular hospital or from a particular doctor for a number of other reasons, such as the location of the hospital or the reputation of the doctor.

The concept of patient choice is often used to refer to the choice of hospital or doctor. However, it can also refer to the choice of treatment. Patients may choose to receive a particular treatment because they believe it is the best for them, or because they have heard that it is effective.

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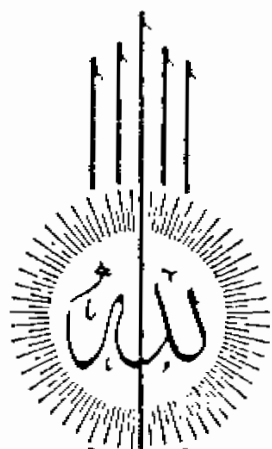
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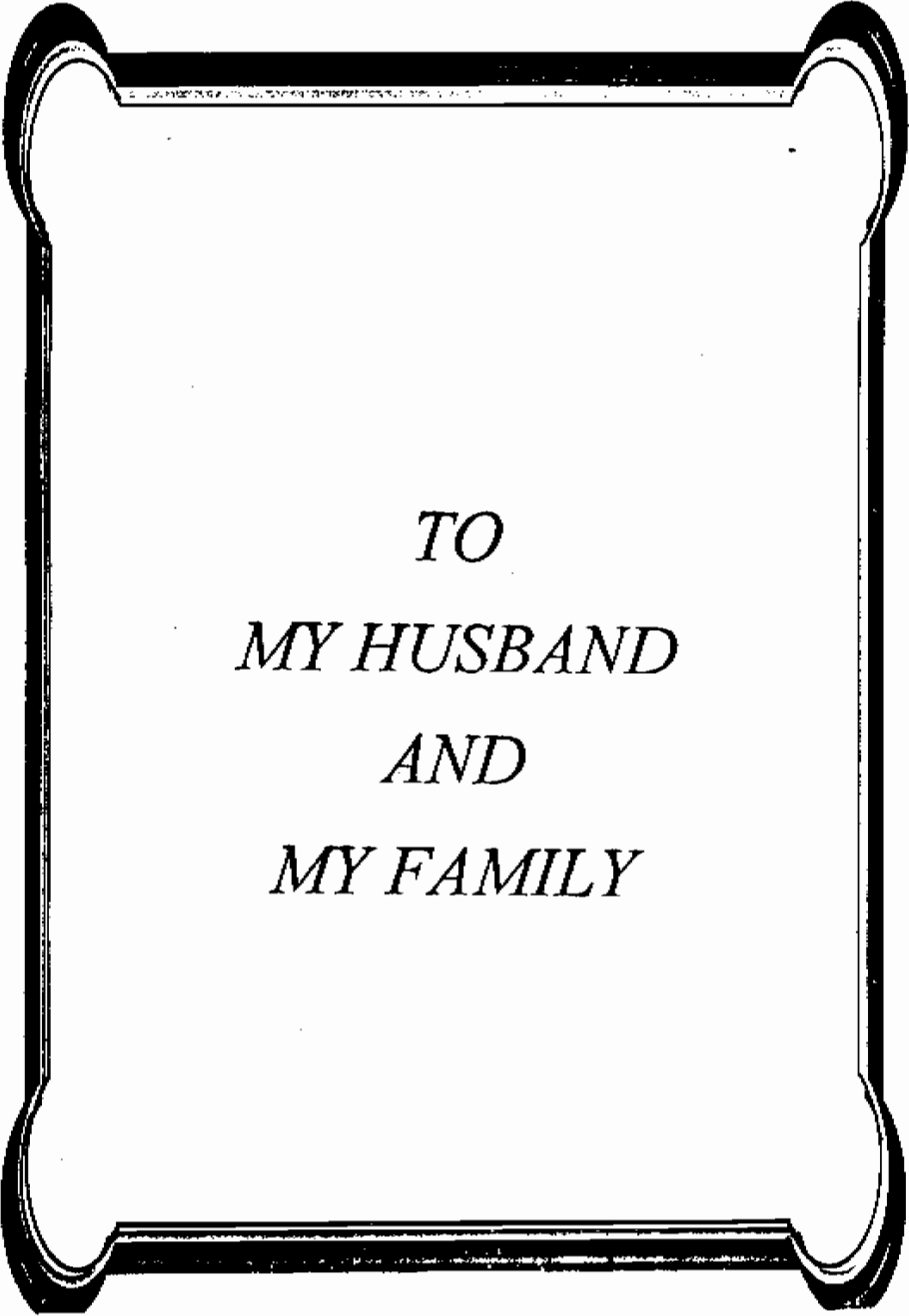
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قَالُوا سُبْحَانَكَ لَا عِلْمَ لَنَا إِلَّا مَا
عَلَّمْتَنَا إِنَّكَ أَنْتَ الْعَلِيمُ الْحَكِيمُ

سُورَةُ الْبَقَرَةِ - آيَةُ ٢٢



*TO
MY HUSBAND
AND
MY FAMILY*

APPROVAL SHEET

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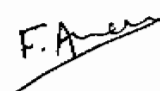
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ABSTRACT

The present work deals with the effect of combined treatment of mice with nicotine and alcohol on the fertility, pregnant mothers and their newborn. The drugs were injected intraperitoneally in daily doses equivalent to 2.5 mg/kg body weight of nicotine and 0.015 ml/g body weight of 25% (V/V) ethyl alcohol. The males were treated daily with nicotine and alcohol doses for 30 successive days before mating. Females were treated for the same period before mating and/or throughout pregnancy. The combined treatment with nicotine and alcohol before mating did not affect fertility of either males or females. Injection of nicotine and alcohol caused a significant decrease of body weight. Abortions and mortality were recorded among mothers of control and all experimental groups. Injection of nicotine and alcohol to mothers before mating and/or throughout gestation period also caused a significant decrease in body weight and body length, and in the number, of the newborn of all treated groups. Skeletons of newborn mice of different treated groups exhibited extreme retardation in the formation of skeletal elements. The effect of nicotine and alcohol on liver of treated mothers and newborn was manifested by marked congestion of blood vessels, cloudy swelling, degeneration, cellular necrosis and inflammatory cell infiltration. The kidneys of treated mothers and newborn showed venous congestion of the glomerular tuft and blood vessels, beside degenerative changes and cellular necrosis in the convoluted tubules, Henle's loops and collecting tubules. The lungs of both mothers and delivered newborn showed pulmonary edema, thickening of the interalveolar septa and congestion of the blood vessels. The pathological alterations in the testis of treated adult

and parentally treated newborn included disorganization of the germinal epithelium, degeneration of the germ cells especially spermatogonia and spermatocytes and increase in the intertubular spaces. In the interstitial tissue the most marked changes were hemorrhage, edema and the congestion of some blood vessels, besides the various degrees of degeneration of Leydig cells. The ovary of treated mothers and their newborn showed reduction in the number of ovarian follicles, increase in the number of degenerated (atretic) follicles, congestion of blood vessels and the presence of hemorrhagic areas in the cortical and medullary regions. Vacuolation and degeneration in the granulosa of the follicular and stromal cells were noticed. The present results were thoroughly discussed with those of previous investigators.

Key words : Nicotine, Alcohol, Fertility, Morphology,
Skeleton, Histology, Mice, Newborn.

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