

The Egyptian Registry of Antiepileptic drugs in Pregnancy (E.R.A.P.).

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

﴿يَرْفَعِ اللَّهُ الَّذِينَ آمَنُوا مِنْكُمْ وَالَّذِينَ أُوتُوا الْعِلْمَ دَرَجَاتٍ وَاللَّهُ بِمَا تَعْمَلُونَ خَبِيرٌ﴾

صَلَّى اللَّهُ الْعَظِيمِ

[سورة المجادلة: 11]

To

My WIFE.....

&

My Son.....

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List of Abbreviations

AED	AntiEpileptic Drug
BDZ	BenzoDiaZepines
CBZ	Carbamazepine
CNS	Central Nervous System
Computered Topography	CT
DHEAS	
DiHydroEpiAndroSterone sulfate	
EDHS 2014	Egypt Demographic and Health Survey 2014
ERAP	Egyptian Registry of AED in pregnancy
EEG-Video	Electroencephalogram-Video
ETX	Ethoximide
FSH	Follicle Stimulating Hormone
GnRH	Gonadotrophin Releasing Hormone
ILAE	International League Against Epilepsy
IUGR	IntraUterine Growth Retardation
KREP	Kerala Registry of Epilepsy and Pregnancy
LTG	Lamotrigine
LEV	Levitiracetam
LH	Luteinizing Hormone
MRI	Magnetic Resonance Imaging
MCMs	Magor Congenital Malformations
NIH	National Institute of Health
NMDA	N-Methyl-D-Aspartate
OXZ	Oxycarbamazepine
PHT	Phenytoin
SZ	Seizure
TPM	Topiramate
VPA	Valproate
WWE	Women With Epilepsy

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(I)

Introduction and Aim of Work

The National Institute of Health (NIH) defined registry as a collection of information about individuals, usually focused around a specific diagnosis or condition. Many registries collect information about people who have a specific disease or condition. Individuals can provide information about themselves to these registries on a voluntary basis. Registries can be sponsored by a government agency, nonprofit organization, health care facility, or private company. Health registration has developed through time as a slow process with many failures and successes [Amal S., Et al. 2014].

There are currently several pregnancy registries monitoring the outcomes of antiepileptic drug (AED)-exposed pregnancies worldwide: the North American Pregnancy Registry, the United Kingdom Epilepsy and Pregnancy Register, the Australian Registry of Antiepileptic Drugs in Pregnancy, the International Lamotrigine Registry, The Kerala Registry of Epilepsy and Pregnancy (KREP), and the European Pregnancy Registry. The goal of these registries is to gather information about the relative risks of AEDs during pregnancy and particularly to capture outcomes of exposure to the newer AED. According to the similarity of the methods and the reliability of the prospectively obtained results, the findings of these registries should reinforce one other in some aspects and contradict each other in other aspects. Furthermore, these aspects has not been determined or standardized, which makes it difficult to compare data sets, a fact that clearly makes it difficult to accurately compare AED-associated malformation risk rates across the various pregnancy registries

[Sanjeev V., Et al. 2017; J Morrow, Et al. 2006; Cynthia I. 2006;].

The (KREP) is the only registry that prospectively compiles pregnancy outcome and Major Congenital Malformations (MCMs) for Women With Epilepsy (WWE) of non-European descent living in low-income circumstances in Asia

[Sanjeev V., Et al. 2017].

To the maximum of our knowledge this work will represent **the 1st primitive trial** to establish an Egyptian Registry of AED in pregnancy (ERAP) in low income circumstances not in Asia but in Africa and the Middle East.

Epilepsy was defined conceptually in 2005 as a disorder of the brain characterized by an enduring predisposition to generate epileptic seizures. This definition is usually practically applied as having two unprovoked seizures >24 h apart. The International League Against Epilepsy (ILAE) accepted recommendations of a task force altering the practical definition for special Circumstances that do not meet the two unprovoked seizures criteria. The task force proposed that epilepsy be considered to be a disease of the brain defined by any of the following conditions: At least two unprovoked (or reflex) seizures occurring >24 h apart; one unprovoked (or reflex) seizure and a probability of further seizures similar to the general recurrence risk (at least 60%) after two unprovoked seizures, occurring over the next 10 years; diagnosis of an epilepsy syndrome [Robert S., Et al. 2014].

Epilepsy is common, with up to 0.5–1% of the population having active epilepsy, one third of who are women of childbearing potential. There is exposure to antiepileptic drugs (AEDs) in approximately 0.3–0.6% of pregnancies [Naghme Adab & David W Chadwick. 2011].

Drug resistant epilepsy is responsible for high social and economic costs. Approximately 60% of all patients with epilepsy suffer from focal epilepsy, and in one third of these patient seizures are not adequately controlled with antiepileptic drugs [Ahmed A., Et al. 2006].

Demographic data about the Egyptian females obtained from EDHS 2014;

The Egypt Demographic and Health Survey 2014 (EDHS 2014) is the most recent in a series of national-level population and health surveys in Egypt. The EDHS 2014 was conducted under the auspices of the Ministry of Health and Population. A total of 29,471 female were the selected sample for this project (Table 1 & Figure 1).

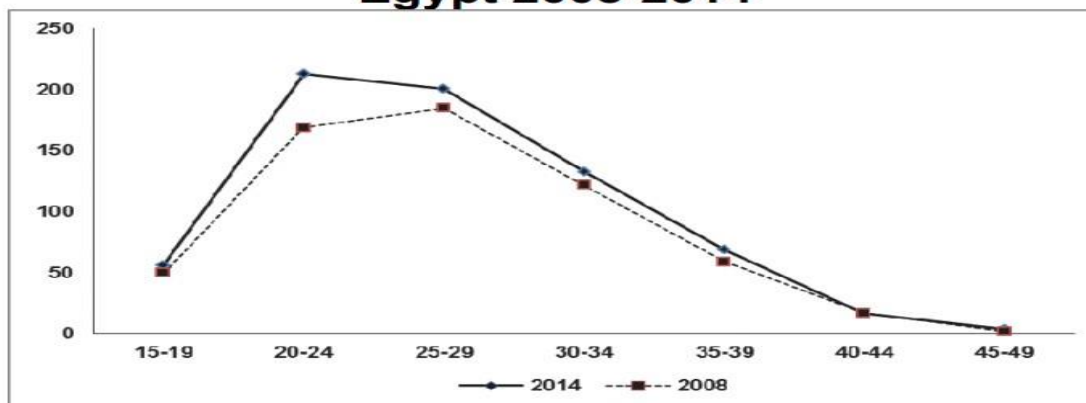
Percent distribution of ever-married women by selected background characteristics, Egypt 2014

Table (1)

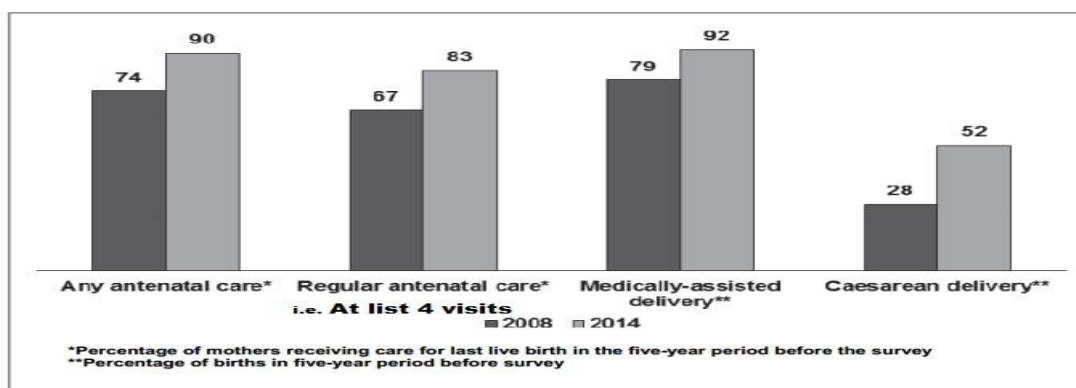
Characteristic	percent
Marital status	
Currently married	94.0
Widowed	3.1
Divorced	2.1
Separated	0.8
Age	
15-19	3.5
20-24	14.0
25-29	21.8
30-34	19.0
35-39	16.1
40-44	13.2
45-49	12.4
Education	
No education	24.0
Some primary	6.1
Primary complete/ Some secondary	17.4
Secondary complete/Higher	52.4

EDHS 2014

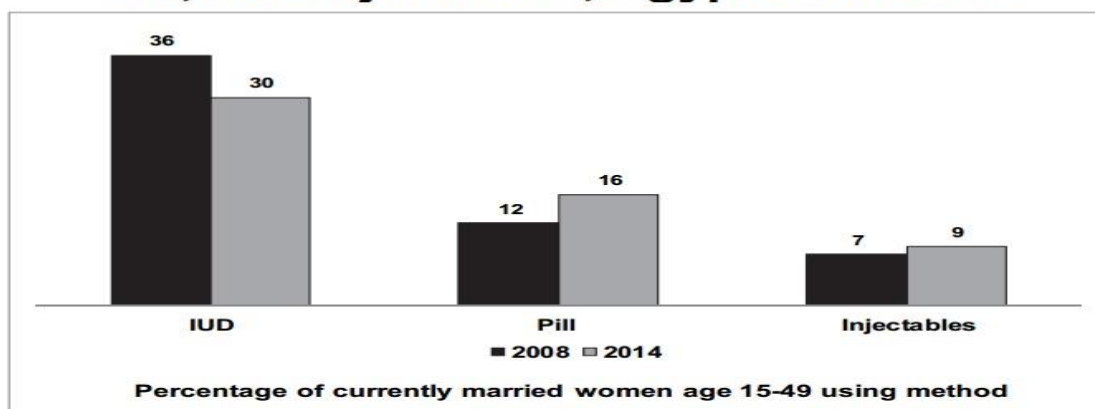
Figure (1) **Trend in Age-Specific Fertility, Egypt 2008-2014**



Trends in Maternal Health Indicators, Egypt 2008-2014



Trends in Current Use of IUD, Pill, and Injectables, Egypt 2008-2014



Aim of work:

To explore the effect of AEDs itself and/or the reasons they were used for, on adverse pregnancy outcomes in this group of females that receive AEDs before and/or during pregnancy.

To explore the effect of pregnancy on both the epileptic seizures and/or the AEDs.