TOXOPLASMOSIS-RELATED KNOWLEDGE AMONG PREGNANT WOMEN ATTENDED IN PUBLIC HEALTH FACILITIES IN CASABLANCA, MOROCCO

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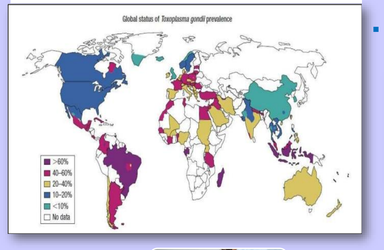
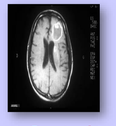
BACKGROUD

- Toxoplasmosis: parasitosis due to *Toxoplasma gondii*
- Perevalence in Morocco 43% -50%



The two populations most at risk of developing health problems after *T. gondii* exposure.

- Immunocompromised
- Pregnant women



Cerebral toxoplasmosis

Congenital Toxoplasmosis

Secondary prevention
Protect

- Prenatal screening for pregant women (IGG, IGM)
- Serological monitoring (amniocentesis, PCR)

- Information
- Education
- Associated with health and diet recommendations

Primary Prevention
Prevent

- Supported
- Newborn screening

Tertiary prevention
To treat

Primary prevention is essential and recommended the basis of any prevention approach

1998: CDC recommends determining knowledge and practices related to toxoplasmosis

OBJECTIFS OF STUDY

Evaluation of knowledge ⇒ **Identification gaps** ⇒ **INTERVENTION Strategy implementation**

- Education sessions, training, awareness tools

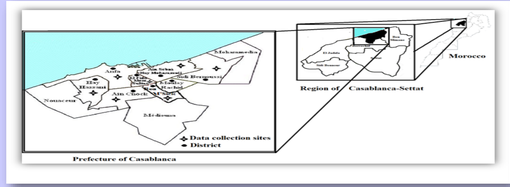
RESULTS

Short term	Middle term	Long term
▪ Improve knowledge ▪ Share information ▪ Increase the predisposition to adopt good behavior	▪ Adopt good behavior or attitude towards risk factors	▪ Reduce the risk of disease

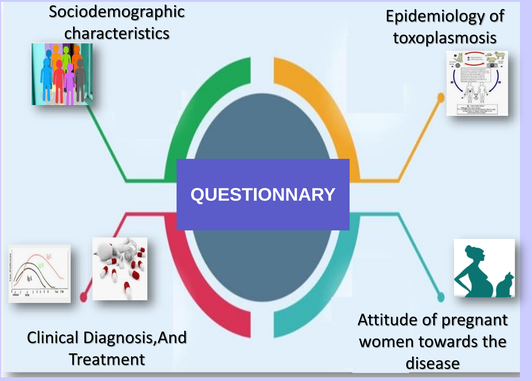
MATERIELS AND METHODS

STUDY AREA

Cross-sectional observational studies carried out between 2017 and 2018.



DATA COLLETION

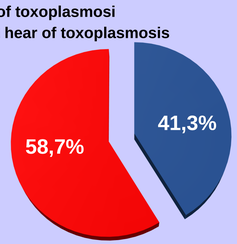


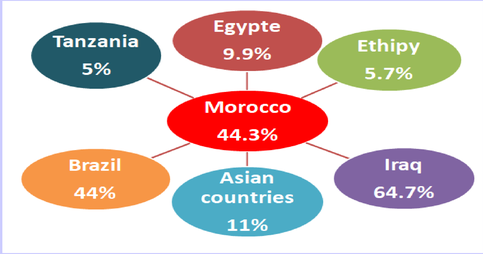
DATA ANALYSIS

Data analysis: Descriptive analysis with Epi Info software

Ethical Considerations Confidentiality and anonymity of information collected

RESULTS AND DISCUSSION





▪The majority of pregnant women were unaware of toxoplasmosis and only **41.3%** of them had heard or read about toxoplasmosis. This rate remains higher than other studies reported in Africa , Asian countries , Arabics countries

▪The low awareness of pregnant women obtained in our survey is probably due to the absence of toxoplasmosis screening program in Morocco.

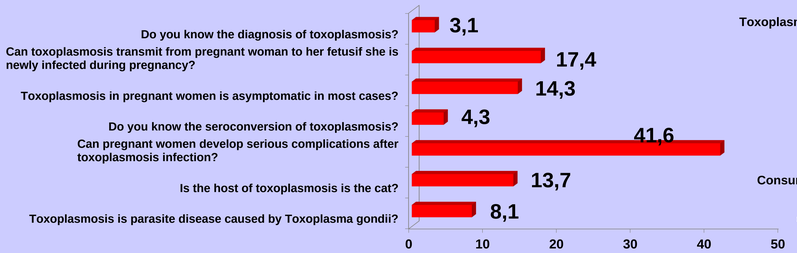
▪A previous study in Poland has highlighted the role of prevention programs on the incidence of seroconversions between 1991 and 1997. The authors have concluded that the knowledge of pregnant women has almost doubled from 24.3% in 1991 to 45.3% in 1997 .

▪Education is important for pregnant women as it increases their awareness as to the importance of hygiene to prevent all sorts of diseases including toxoplasmosis. Hence, the educational level can be a protection factor against *T. gondii* infection during pregnancy.

Distribution of pregnant women treated in public healthcare service according to age, gestational age , parity, history of abortion and toxoplasmosis heard in Casablanca in Morocco (N=390)

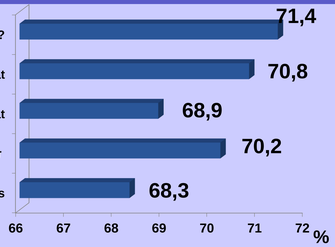
	Aware of toxoplasmosis n (%)	Unaware of toxoplasmosis n (%)	N	X^2	p
Age (Years)					
< 25 years	30(31.3)	66(68.8)	96	6.875	0.0321*
25-34	92(47.2)	102(52.8)	193		
35-48	39(39.4)	60(60.6)	99		
Parity(number of pregnancy)					
Nulliparous (=0)	50(36.8)	86(63.2)	136	4.21	0.1215
Pauciparous(1-2)	98(45.8)	116(54.2)	214		
Multiparous (≥ 3)	13(32.5)	27(67.5)	40		
Origin					
Urban	116(44.1)	147(55.9)	263	2.68	0.2607
Suburban	5(33.3)	10(66.7)	15		
Rural	40(35.7)	72(64.3)	112		
Gestational age					
First trimester	63(38.9)	99(61.1)	162	1.83	0.3997
Second trimester	58(40.3)	86(59.7)	144		
Third trimester	40(47.6)	44(52.4)	84		
Educational level					
Illiterate	29(29.9)	68(70.1)	97	34.97	0.0000*
Incomplete elementary school	44(32.1)	93(67.9)	137		
Incomplete high school	33(43.4)	43(56.6)	76		
Complete higher education	55(68.8)	25(31.3)	80		
History of abortion					
Yes	42(38.5)	67(61.5)	109	0.47	0.4920
No	119(42.3)	162(57.7)	281		

KNOWLEDGE OF GENERAL INFORMATIONS OF TOXOPLASMOSIS



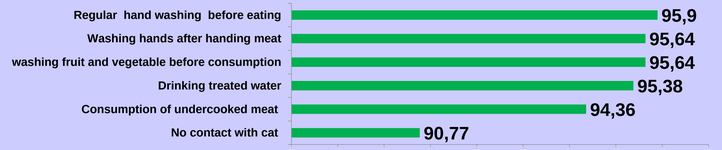
Less than half were unaware about the genrel information of toxoplasmosis

KNOWLEDGE OF THE RISK FACTORS OF TOXOPLASMOSIS



More than half were aware of risk factors of toxoplasmosis

BEHAVIOURS OF PREGANT WOMEN



Probably, the pregnant women under the present study were properly avoided the risk behaviors, without realizing what they were avoiding. The same findings were was reported in Egypt (2014), where the majority of the studied women had a positive attitude towards the preparation and cooking of meat, importance of the use of soap while washing hands after handling meat, vegetables.

CONCLUSION & RECOMMANDATION

▪This is the first report assessing Toxoplasmosis knowledge and practice among pregnant women in Casablanca city in Morocco.

▪ Most pregnant women participated in our study were unaware of toxoplasmosis infection, therefore, It is crucial to improve toxoplasmosis information to pregnant women during pregnancy.

▪ It emphasizes the need for implementation of program surveillance of toxoplasmosis by Ministry of Health in Morocco which involved health education to ensure reproductive health to the pregnant women about disease in order to prevent the risks for the fetus and consequently to reduce the incidence of congenital toxoplasmosis.

▪ Update the knowledge for medical personnel, is also recommended. This can be done through strengthening of the curriculum for training of enrolled nurses and midwives to cover more aspects of congenitally transmitted diseases including toxoplasmosis.