

Assessment of Gestational Diabetes, Urinary Tract Infections, and Folic Acid Intake in Lebanese Pregnant Females

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BACKGROUND

- Pregnancy is associated with multiple health problems, which can be controlled by raising awareness about the complications that occur
- Many Lebanese females in their childbearing age are not knowledgeable about the importance of folic acid intake and the risk of developing gestational diabetes mellitus (GDM) or urinary tract infections (UTI) during pregnancy

OBJECTIVES

- Aim
 - Check whether females have been screened for GDM and counseled for UTI and the intake of peri- and post-conceptual folic acid

METHODS

- Type
 - Retrospective multicenter observational study
- Setting
 - Community
- Institutional review board approval
 - Lebanese International University
- Time Frame
 - November 2014 and June 2015
- Inclusion criteria
 - Women who have experienced at least 1 pregnancy during their lifetime
- Data Collection
 - PharmD candidates
 - Data collection form
 - Oral informed consent
 - 20 variables
 - Demographics
 - Screening for GDM
 - Intake of folic acid
 - History of UTI
- Statistical analysis
 - SPSS version 20.0
 - Frequency, percentage, means, and standard deviations (SD)
 - Pearson chi square p-value of less than 0.05 was considered to indicate statistical significance

RESULTS & DISCUSSIONS

- Sample size
 - 381 females
- Characteristics
 - Age: 16 to 48 years old (mean of 29.23)
 - Average age of marriage: 21.73 years
 - Age of last pregnancy achieved: 26.54 years
 - Average number of pregnancies: 2.52
- GDM
 - 42.3% stated their knowledge of the importance of such a screening
 - 59.1% were screened with an OGTT and 32.8% with an FBG
 - 3.5% positive tests for this type of diabetes (3.1% had gained <18 kilos; p-value>0.05)
 - 69% implemented dietary changes and 46% took metformin
- Folic acid intake
 - 85.6% took it at a dose of 5mg
 - 33.1% for 1 month before gestation
 - 46.7% in the first trimester
 - 27.3% up to the second
 - 11.5% throughout pregnancy
 - Pregnant females were taking folic acid 400 micrograms/day from the vitamin supplement without any assessment of risk factors to adjust the dose
- UTI
 - 125 (32.8%) had a UTI during pregnancy
 - Fluid intake
 - 93.2%: <2 L of fluids per day
 - Cranberry intake
 - 6.4%: Juice and Tablets
 - Antibiotics: Beta lactams, Fluoroquinolones, TMP-SMX, Clindamycin, Fosfomycin

CONCLUSION

- A big percentage of the females don't know the role of GDM screening and its impact
- The role of peri-conceptual intake of folic acid to decrease neural tube defects' risk is not sufficiently disseminated to young women, whereas the post-conceptual was appropriate, but not based on risk factors
- Therapeutic management of UTI in pregnancy requires thorough understanding of antimicrobial agents along with fluids intake to optimize maternal and fetal outcomes
- Pharmacists have a key role in enhancing counseling of expecting mothers about GDM, folic acid intake, and UTI management

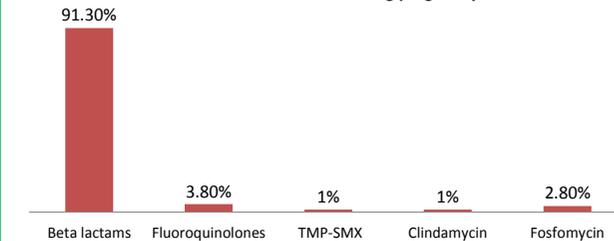
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TABLES

Folic acid intake prior gestation	Yes	No
Percentage	33.1%	66.9%

Antibiotics to treat UTI during pregnancy



GRAPHS

Intake of Folic Acid

