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QUALITY OF LIFE RELATED TO URINARY INCONTINENCE DURING PREGNANCY IN BRAZILIAN WOMEN ATTENDED AT THE BASIC HEALTH UNITS, ACCORDING TO THE KING'S HEALTH QUESTIONNAIRE – KHQ.

Hypothesis / aims of study
This study aimed to evaluate quality of life related to urinary incontinence (QoLrUI) during pregnancy and the *affected* domains according to the King's Health Questionnaire – KHQ – in women attended at the Basic Health Units in the city of Fortaleza/CE/Brazil.

Study design, materials and methods
Quantitative study, cross-sectional, descriptive and exploratory, held on 29 Basic Health Units that performed prenatal care, on all six Executive Regional General Offices in Fortaleza/CE. One hundred and two pregnant women were included. The inclusion criteria were the complaint of any type or intensity of UI on the last tree months, age between 20 and 39 years, single fetus, gestational age (GA) of 32 to 41 weeks, and the participants had to be registered on the Family Health Center of the Brazilian Public Health System. Neither skin color, social, economic nor cultural level was used as an exclusion criteria. There were excluded from the study women with multiple fetus, hypertension, collagen disease, *Diabetes Mellitus*, neurological and/or respiratory disease, history of spine and/or pelvic surgery (except caesarian section), use of parasympathicomimetic drug or sympatholitic, and having any kind of impairment to communicate. Information was obtained in the *Prenatal Chart* and/or by previous history. Eight research assistants interviewed the pregnant women. Socio-economic and past obstetrical history data was collected. All participants signed a consent form. Data was obtained between July and September of 2009, after the ethics committee approval (by the report #264/2009). Data was coded and transferred to the Statistical Package for Social Services (SPSS) 13.0 version for Windows Software. The results were considered statistically significant if $p \leq 0.05$.

Results
The quality of life (QoL) domains affected (from the highest to the lowest mean) were: sleep/energy 52,56% (sd= 27,54, n= 102); UI impact 40,51% (sd= 31,34, n= 102); general health perception 38,73% (sd= 19,47, n= 102); emotions 27,44% (dp= 23,56, n= 102); role limitations 24,35% (sd= 24,67, n= 102); severity measures scale 21,41% (sd= 17,67, n= 102); physical limitations 12,42% (sd= 20,13, n= 102); personal relationships 10,44% (sd= 23,56, n= 75); impact on social limitations 10,02% (sd= 14,22, n= 102). In the KHQ the urinary symptoms were classified as "a little", "moderately" and "a lot". For a better understanding, the authors stratified the domain values: 0-25% were categorized as "good" QoL; 25,1-50% as "regular"; 50,1-75% as "bad"; 75,1-100% as "deficient". The general health perception, UI impact, and emotions were considered "regular" QoL, while the sleep/energy domain was "bad". The most significant correlations were between mild to serious UI and sleep/energy (p=0,01), severity measures scale (p= 0,022), personal relationships (0,032) and UI impact (0,049); white skin colored women, emotions (p=0,006) and increased urinary frequency (p=0,006); unplanned pregnancy, emotions (p=0,006), nocturnal enuresis (p=0,013), coital incontinence (p=0,021) and bladder pain (p=0,033). Coital incontinence was the symptom that impaired most of QoL domains (p<0,0001).

Interpretation of results
QoLrUI had little effect on brazilian pregnant women, even though 50% of them reported that SUI and/or UUI symptoms were "moderately/a lot". The only domain that was considered "bad" was sleep/energy; three were found "regular" (general health perception, UI impact, emotions), and four were described as "good" (role limitations, physical limitations, social limitations, personal relationships, severity measures scale). Since the pregnant women were of low risk there was a minimum interference of other comorbidities in the QoLrUI. A study [1] showed that primigravida did not feel disturbed by the UI, however, after three months of delivery, the number of women with the symptoms decreased, but their QoL worsened. The presence of urinary symptoms associated with UI contributed to impair QoL [1]. Differently, a Brazilian study (using the KHQ) [2] found that non-pregnant young women had all the domains affected over 30% (p<0,05) - UI impact (78,2%) and role limitations (75%) were the worst results. Young women tend to have more impact of QoLrUI because they are more social, economic and sexually active [2]. The pregnant women whose occupational activities were outside their home had greater impact on the sleep/energy QoL domain and nocturia (p<0,05), maybe due to the fact that this may worsen their work productivity. Most of the pregnant women thought that UI was a natural aspect of pregnancy and that it was not a disturbance which deserved intervention. Other studies have confirmed these results [2, 3].

Concluding message
It seems that pregnant women attended at the Basic Health Units in the city of Fortaleza/CE/Brazil were mildly affected on their QoLrUI. Among the eight domains and the independent scale of UI severity measurement, there was greater disturbance on sleep/energy, UI impact, general health perception and emotions. The coital incontinence was the symptom that impaired most of QoL domains. This fact suggests that this urinary symptom constrains women the most. Many pregnant women did not realize that they could prevent and/or treat UI during pregnancy, because they thought it was "a natural aspect of pregnancy". The research revealed that single women, white skin colored, and unplanned pregnancy had correlation to certain domains of QoLrUI and some urinary symptoms. This fact may lead to a change in attitude on health professionals, in order to develop a better listening of the patients and a more humanized care during antenatal and post natal period.

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