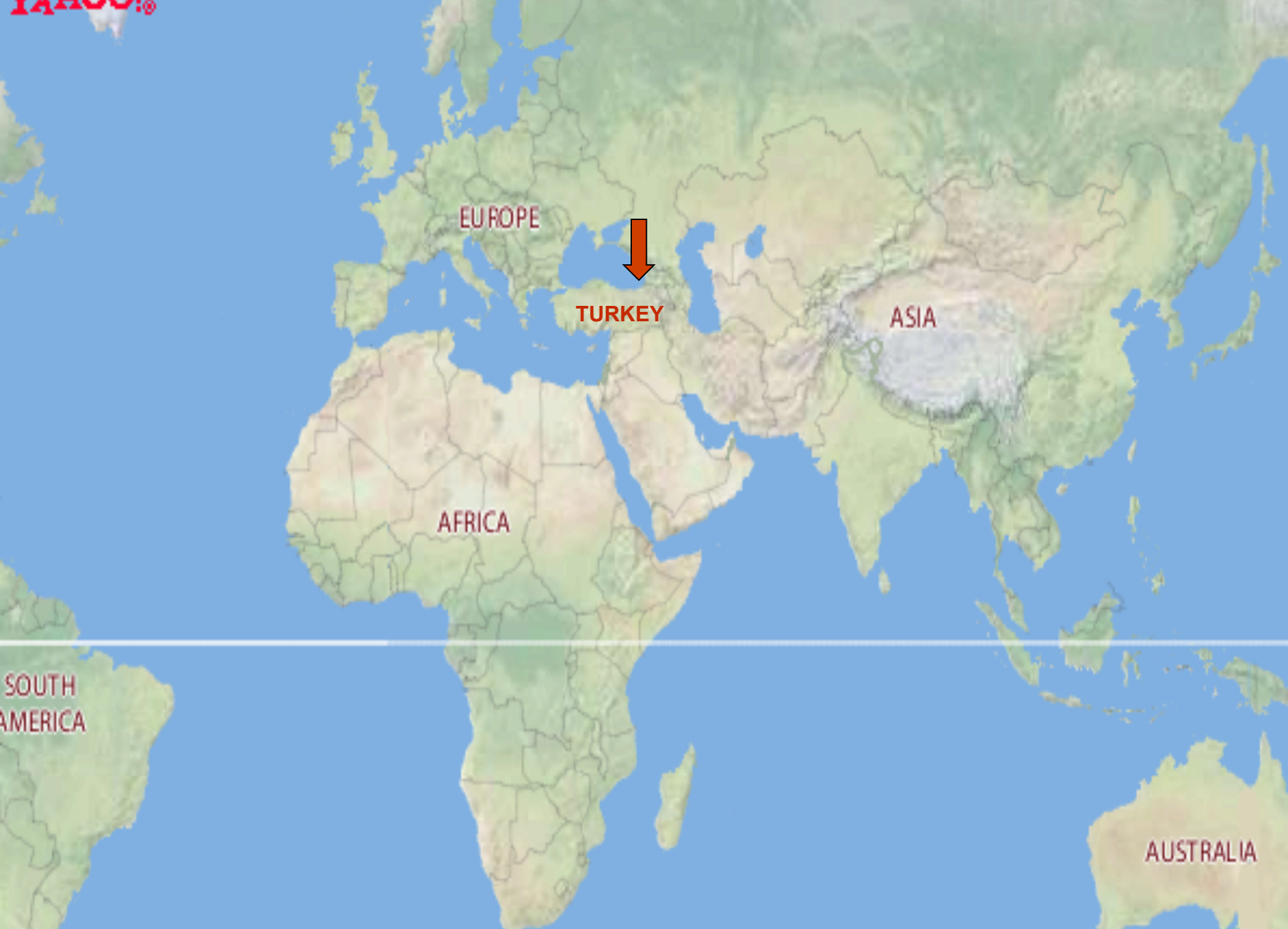
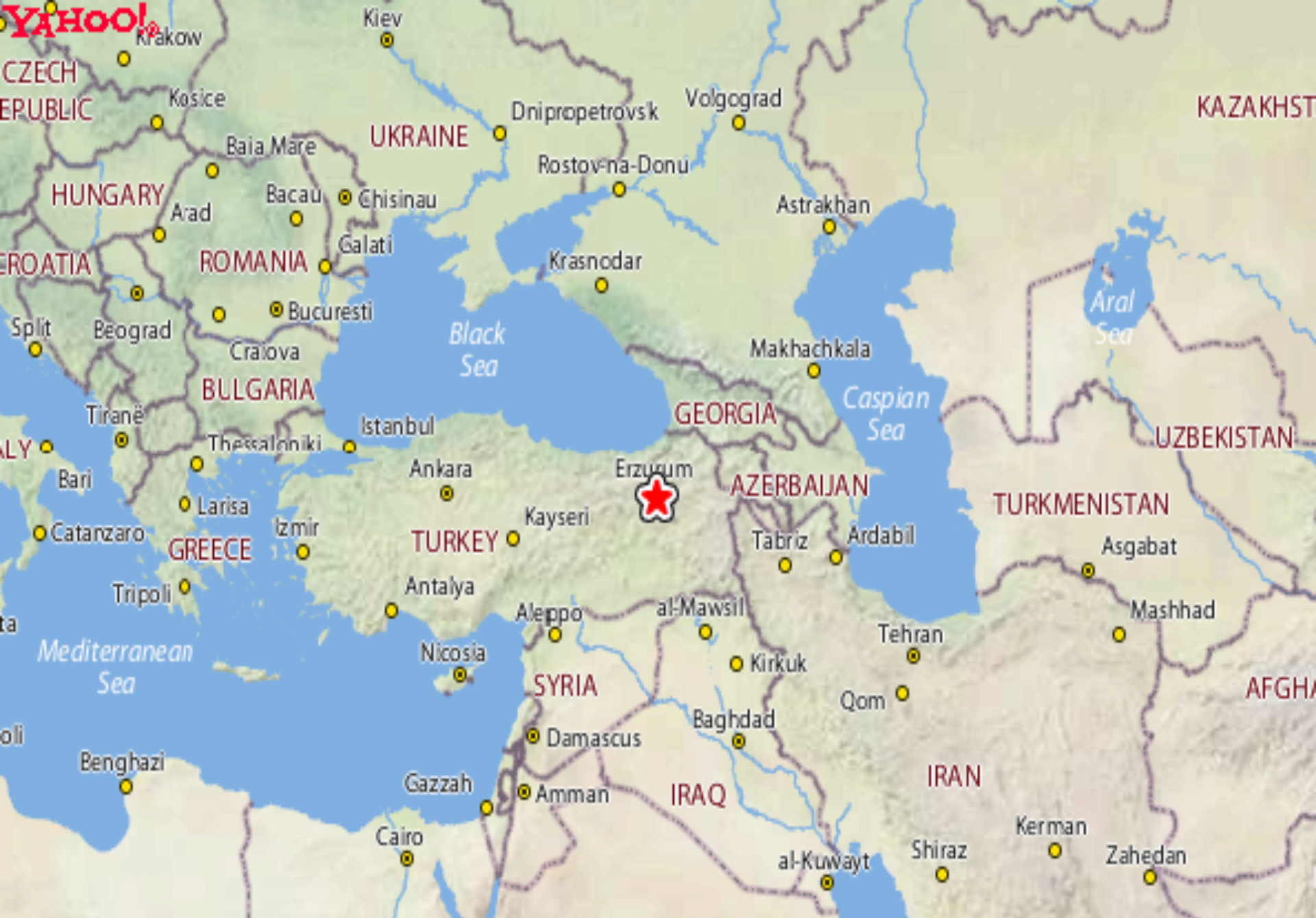


Prevalence and Risk Factors for Maternal Depression in Erzurum, Turkey



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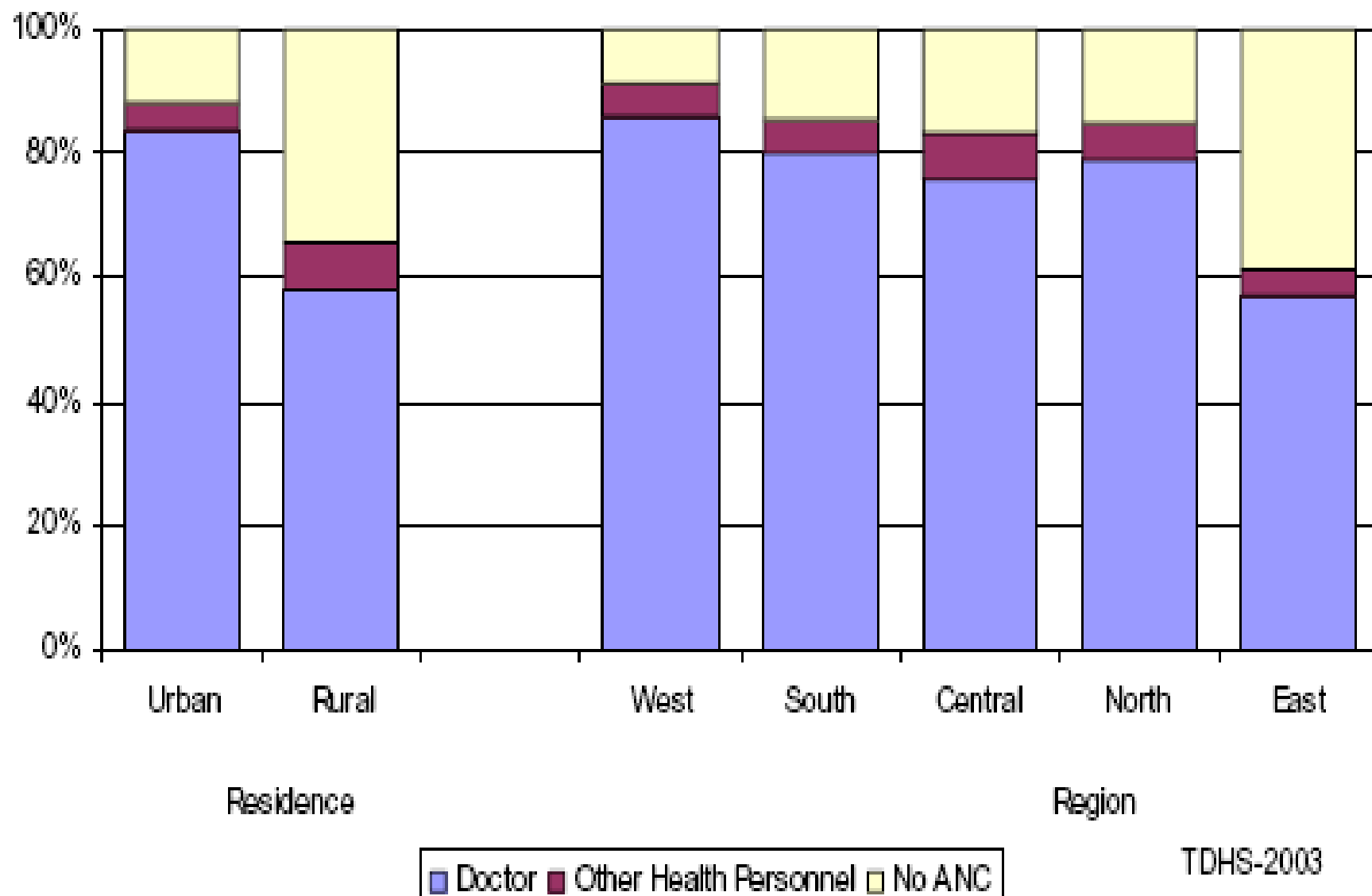


Socio demographic features of women in this region

- illiteracy ratio is 25%
- The total fertility rate is 3.65 %
- Most of the marriages are arranged ones
- The divorce rate is 0.46%
- Parenthood outside marriage is very rare

(Hacettepe TDHS 2003, Republic Of Turkey, Prime Ministry State Institute of Statistics, 2002)

Antenatal Care by Region and Residence





- Social support tends to be provided by the woman's and/or husband's family rather than by her husband especially the mother or mother-in-law of the women, usually until the baby is forty days old.
- The mother is not alone, and many people, not just family, visit her and congratulate her for the birth.
- In this region, we often encounter broad families in which the family lives together with their parents; furthermore, even in core families, the parents of the couples may play an active interfering role.

METHODS

Sampling Procedure

- The total number of the women who were in their first postpartum year was 8,575.
- Using the prevalence rate of PND according to previous studies as 10.4% and mean standard deviation as 0.02, with a reliability of 95% the minimum sample size required was calculated as 785.
- The power of the chi square test was 89.6% for the comparison of the prevalence by the cities when the significance level was accepted 0.05 in a two-sided hypothesis.

METHODS

During January-February 2003, women who were in the first postnatal year were randomly selected from applicants to seven primary health care units seeking routine healthcare for the baby such as vaccinations.

All of the selected women in the postpartum first year were invited to participate to the study. After providing a complete description of the study, written informed consent was obtained.

Of 918 women selected, 780 (85%) participated in the interview.

All the data were collected by face-to-face interviews at the primary care units.

Assessment

A structured and self-reported questionnaire,

Demographic variables

(age, education, job of women and her husband, economic status, family and marriage type),

Obstetric information

(medical control during the pregnancy, place and type of delivery, the number of fetuses in the pregnancy)

Gender, birth weight, and nutrition type of baby

Women's views about their own relationship with their parents,

The temperament and health of the infant were asked as to whether they were bad or good.

yes or no questions

having a close friend,
having a stressed family relationship in childhood,
history of premenstrual symptoms,
whether the pregnancy was planned,
sufficiency of baby care,
any infant health problems,
Exposure to stressful life events during the pregnancy,
miscarriage history,
any physical disorders during pregnancy,
any psychiatric disorder before and during pregnancy,
support of husband,
whether the husband had a psychiatric disorder.

- The Turkish version of EPDS was used (the scale was translated into Turkish)
The cut off value was accepted as 13.

Statistical Analysis

Chi-square analysis was used to evaluate the differences between women with high scores and women with low scores by education level,
age groups,
marital type,
job status,
and family type.

Multiple logistic regression analysis was also used to determine multivariate odds ratios for
husband's employment,
psychiatric history,
stressful life events,
husband support,
temperamentally difficult child,
infant with disease
and history of premenstrual symptoms.

RESULTS

- Due to exclusion criteria, 728 women were included in the study.
- The percentage of women with high EPDS scores (13 or over) was 34.6 in this study.
- The overall mean EPDS score and standard error of mean was 11.3 ± 0.2 and Chronbach's Alpha value 0.80.

- Sixteen percent of the women were unable to read; 47.0% had only a primary education.
- Most of the women were aged 20-29 years, and had an arranged marriage.
- The percentage of housewives was 85.
- Almost two-thirds of the women had a nuclear family that consisted of herself, her husband and another child.

TABLE 1 EPDS-based depression by socio-demographic characteristics of the participants

	Women with high scores ≥ 13 (N = 245)		Women with low scores < 13 (N = 463)		
	<i>n</i>	%	<i>n</i>	%	Statistic
Education Completed					
Unable to read	42	37.5	70	62.5	$p > 0.05$ $\chi^2 = 5.8$
Primary education	115	34.5	218	65.5	
Secondary school	25	46.3	29	53.7	
High school	37	31.9	79	61.8	
Higher education	26	28.0	67	72.0	
Age groups					
< 20	13	32.5	27	67.5	$p > 0.05$ $\chi^2 = 0.2$
20-29	154	34.4	294	65.6	
30-39	71	35.1	131	64.9	
> 40	7	38.9	11	61.1	
Marital type					
Arranged marriage	152	35.8	272	64.2	$p > 0.05$ $\chi^2 = 0.8$
Spouses met themselves	78	32.2	164	67.8	
Job					
Housewife	211	35.0	391	65.0	$p > 0.05$ $\chi^2 = 0.3$
Others	34	32.1	72	67.9	
Family type					
Nuclear	134	32.9	300	67.1	$p > 0.05$ $\chi^2 = 0.2$
Extended	102	37.2	172	62.8	

TABLE 2. Distribution of the EPDS-based depression according to postpartum months

Postpartum months	Depression				Mean ± SD	Number
	No		Yes			
	Number	Percent	Number	Percent		
1	108	62.2	66	37.8	10.7 ± 5.7	174
2	30	49.2	31	50.8	12.7 ± 6.4	61
3	35	69.4	16	30.6	10.6 ± 5.9	51
4	24	65.7	13	34.3	11.2 ± 6.1	37
5	40	68.4	19	31.6	9.6 ± 6.6	59
6	35	61.8	22	38.2	11.9 ± 6.2	57
7	23	50.0	23	50.0	13.0 ± 6.0	46
8	31	68.2	15	31.8	10.6 ± 5.2	46
9	23	56.4	18	43.6	11.8 ± 6.4	41
10	24	57.5	18	42.5	11.3 ± 6.9	42
11	30	58.8	21	41.2	11.8 ± 5.5	51
12	31	49.2	32	50.8	12.4 ± 5.7	63
Total	434	59.9	294	40.1	11.4 ± 6.0	728

TABLE 3. Adjusted odds ratios for risk factors associated with depression, for EPDS ≥ 13 , based on multiple logistic regression analyses

Independent variables	p	Odds ratio	95.0% CI	
			Lower	Upper
Husband with unemployment	0.018	2.9	1.2	7.0
Psychiatric history before pregnancy	0.011	2.4	1.2	4.8
Psychiatric history during pregnancy	0.021	2.3	1.2	4.8
Stressful life events during pregnancy	0.001	2.0	1.3	3.0
Lack of husband support	0.006	1.9	1.2	3.1
Temperamentally difficult child	0.001	1.9	1.3	2.7
Infant with disease	0.022	1.7	1.1	2.6
Premenstrual symptoms	0.042	1.5	1.1	2.1

DISCUSSION

The percentage of women with high EPDS scores (13 or over) was 34.6 in this study

ORIGINAL PAPER

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Validation of the Turkish version of the Edinburgh Postnatal Depression Scale among women within their first postpartum year

Accepted: 18 December 2003

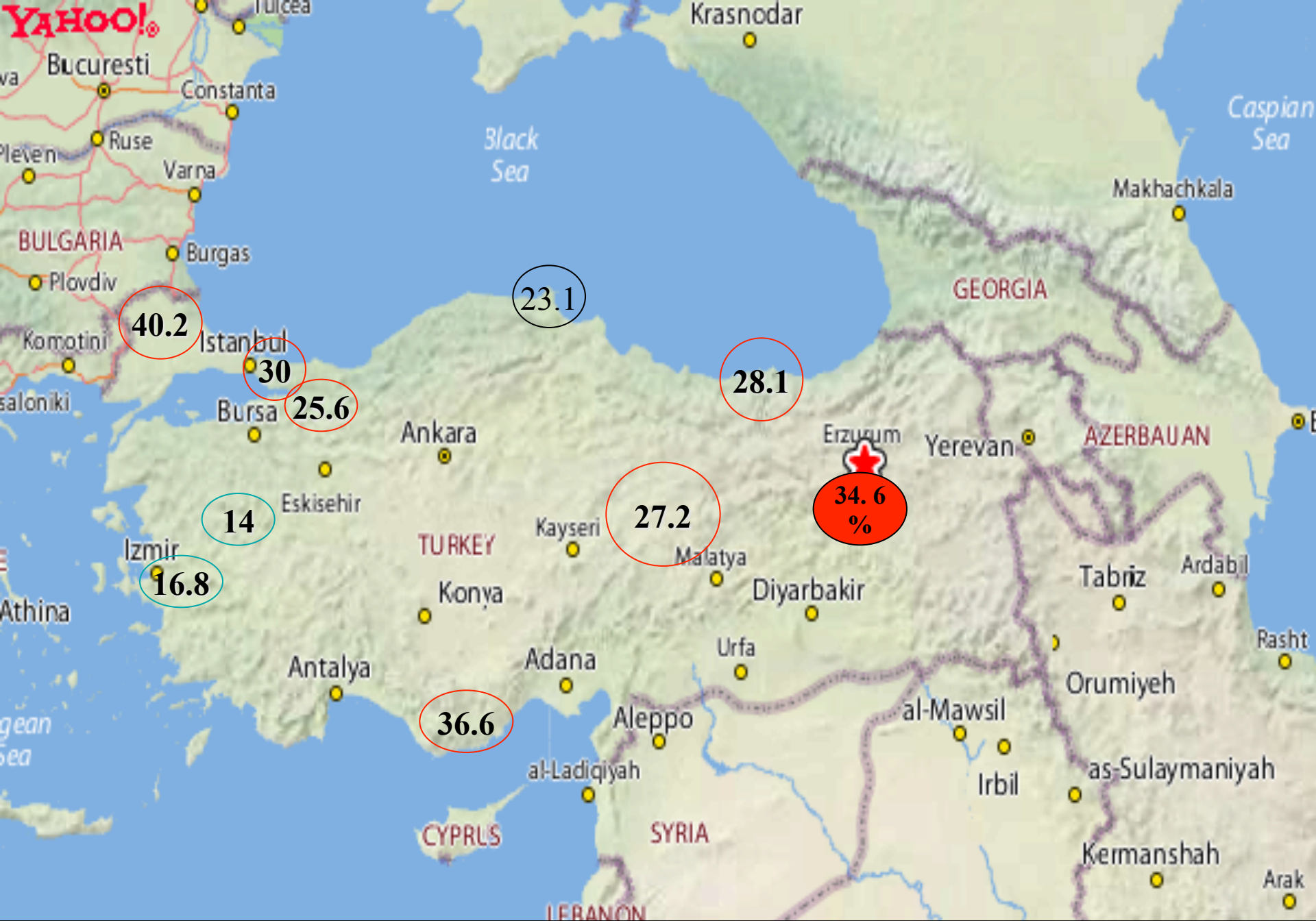
■ **Abstract** *Background* The aim of the study was to find out the validity and reliability of the Turkish version of the Edinburgh Postnatal Depression Scale (EPDS) and to determine the optimum cut-off value for postnatal depression. *Method* Validation of the Turkish version of the EPDS was conducted on a sample of 341 women who were within their first postpartum year. Structured Diagnostic Interview for DSM-IV Axis I Disorders was used as the gold standard test, and receiver operating characteristic analysis was used to evaluate test performance of the EPDS. *Results* The study of sen-

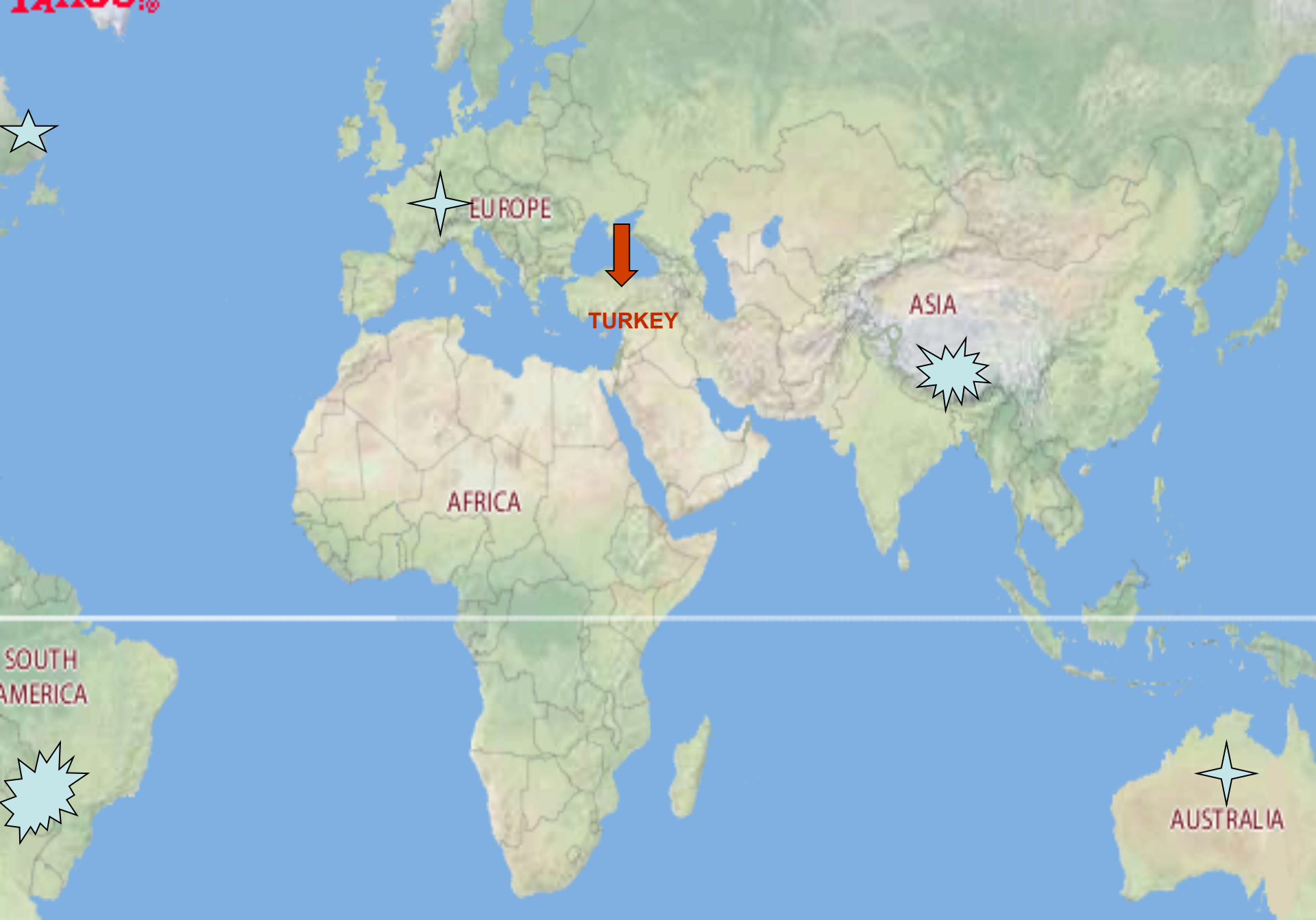
■ **Key words** validation – postnatal depression – Turkish women – sensitivity – specificity

Introduction

Previous studies have shown that postnatal depression (PND) affects at least 10–20% of women in their first postpartum year (O'Hara et al. 1984) and that many depressed mothers remain undiagnosed and untreated. These mothers may still be able to cope with their baby

sensitivity= 75.5% ,
specificity = 71.5 % ,
positive predictive value = 30.3% ,
negative predictive value = 94.5%
and Cronbach' s alpha value = 0.72,
as compared to the SCID-I with a cut-off score of 12.5.





- **Prevalance of PND is very high in the east due to:**
- Cultural conflicts
- Changing roles
- Sex discrimination
- Poverty
- Inadequency of women health centers
- High fertility rate
- Previous and/or current depression

Associated factors with PND

- Having an unemployed husband,
- history of premenstrual symptoms,
- lack of husband support during the pregnancy,
- stressful life-events during the pregnancy,
- an infant with disease,
- a temperamentally difficult child,
- and a positive psychiatric history before during pregnancy were related to depression in the first postnatal year.
- **The factors above are similar to those of other countries**

Things to be done:

- Developing PND prevention programs in Turkey has become a high-priority issue.
- In clinical practice, community-based programs are implemented to meet the care needs of new mothers, including at least two follow-up visits
- Giving education on psychiatric disorders related to pregnancy and birth
- Establishing departments on women's mental health