Factors affecting the utilization of antenatal care services among pregnant women—Ashgabat, Turkmenistan, 2010
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Introduction

- Antenatal care plays an important role in improving pregnancy outcomes and in preventing maternal and fetal mortality and morbidity.
- Public health law and legislations in Turkmenistan guarantee that antenatal services are provided to all pregnant women and are totally free.
- The scope of services is in accordance with the national recommendations:
  - Clinical monitoring of health status of mother and fetus
  - Prophylaxis and treatment of conditions negatively affecting pregnancy outcomes
  - Health education
- While antenatal care is well accepted and practiced in the country, its uptake and determinants have never been studied before.

Methodology

- Study factors:
  - Socio-economic factors (income, education, residence, occupation, family size, etc.)
  - History of complications during previous pregnancies and deliveries
  - Primigravida versus multigravida
  - Mother’s age and health status

Study objectives

- To estimate the proportion of women attending for antenatal care in health centers in Ashgabat, the capital city of Turkmenistan.
- To identify factors affecting utilization of antenatal care among pregnant women in Ashgabat.

Methodology continued...

- Study factors:
  - Socio-economic factors (income, education, residence, occupation, family size, etc.)
  - History of complications during previous pregnancies and deliveries
  - Primigravida versus multigravida
  - Mother’s age and health status

Data sources

- Hospital Log books for deliveries in 2010
- Women’s medical records in policlinics
- Personal interviews with women
- Maternity medical records of the deliveries
- Pregnant women charts kept at home

Analysis

- Data entry, edit checks, consistency check, generating new variables
- Associations between the study variables and attending for antenatal care were first evaluated in monovariate analysis
- Variables significant in monovariate analysis were included in multivariate logistic regression model
- All analysis processing activities were done in Epi Info Version 3.5 and Excel

Study Results

Monovariate analysis: association between the study factors and not attending for antenatal care among pregnant women in Ashgabat city, Turkmenistan, 2010

Study factor | Compared levels | Attendance for antenatal care | Odds Ratio | 95% CI
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First pregnancy | Yes | 73 | 26.4 | 10.6 – 65.9
| No | 5 | 598 | 0.1 – 0.4
Income | < 1200 TKM Manat | 58 | 3.4 | 1.7 – 6.9
| ≥ 1200 TKM Manat | 9 | 319 | 0.1 – 0.4
Type residence | Rented | 13 | 2.4 | 1.3 – 4.5
| Owned | 54 | 842 | 0.1 – 0.4
Mother’s education | Schooling < 9 years | 12 | 0.4 | 0.2 – 0.9
| Schooling ≥ 9 years | 55 | 624 | 0.1 – 0.4
Family size | 5 member or more | 4 | 0.2 | 0.1 – 0.5
| Less than 5 | 69 | 702 | 0.1 – 0.4
Work during pregnancy | Yes | 4 | 0.1 | 0.1 – 0.4
| No | 63 | 644 | 0.1 – 0.4
Previous pregnancy complications | Yes | 2 | 0.1 | 0.02 – 0.3
| No | 76 | 706 | 0.1 – 0.4
Mother’s age | 20+ years | 6 | 1.5 | 0.6 – 3.7
| < 20 years | 72 | 881 | 0.1 – 0.4
History chronic illness | Yes | 34 | 0.6 | 0.4 – 1.0
| No | 44 | 419 | 0.1 – 0.4
Husband’s work | Yes | 4 | 0.4 | 0.04 – 3.5
| No | 1 | 81 | 0.1 – 0.4

Conclusion and Recommendations

- Primipara women and women from low income families are at higher risk for not attending antenatal care centers.
- We recommend the provision of educational interventions to women from low income neighborhoods and those wanting to have babies for the first time.
- Those messages can be distributed through mass media, community workers, and schools. Financial support for low income families should also be considered.

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