IMPACT OF ABORTION COMPLICATIONS ON HEALTH-RELATED QUALITY OF LIFE IN UGANDA

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BACKGROUND

- Illegally-induced abortions represent a significant burden on women in Uganda (Singh et al, 2005)
- One in five pregnancies
- An estimated 207,000 induced abortions annually
- At least 85,000 women treated for complications annually
- Substantial costs associated with induced abortions
- Cost of treating Abortion Complications – $131 per case, $13.9 million per year, and would need $20.8 million per year to satisfy all demand (Viscido et al, 2012)
- Societal costs – $171 per case, $64 million per year (Babigumira et al, 2011)
- No reports on either health-related quality of life (HRQoL) or the potential role of social support in a setting of significant social stigma and legal and moral proscriptions against abortion

OBJECTIVE

- To examine the relationships between abortion complications, social support and HRQoL

METHODS

Setting
- A regional referral hospital in western Uganda

Recruitment
- Between December 2009 and October 2010
- Women discharged after treatment for abortion complications (abortion complications group)
- Women attending routine obstetric clinic (routine obstetric care group)

Procedures
- Demographic variables: age, marital status and highest education level
- Socioeconomic indicators: housing characteristics and ownership of various durable goods
- Medical and obstetric history: number of previous pregnancies, number of children, self-reported HIV status, other chronic medical conditions
- Social support: using the Social Support Questionnaire (SSQ)-short form to measure availability of (SSQN score) and satisfaction with (SSQS score) social support
- HRQoL: EQ-5D scores and utility score (computed using an algorithm based on a population survey in Zimbabwe, Jelsma et al, 2003) and the EQ-VAS score

Analyses
- Socioeconomic index summary constructed by Principal Component Analysis
- Descriptive analyses using t-tests, Wilcoxon rank sum test and chi-square tests
- Pearson correlation coefficient to examine relationship between social support measures and EQ-5D utility scores
- Constructed multivariable linear regression models in which EQ-5D utility score was the dependent variable and participant group was main explanatory variable
- Additive model, adjusting for age, social support, number of children, self-reported HIV status and indicators of socioeconomic status (SES)
- Interaction model (interaction terms between social support measures and main explanatory variable)

RESULTS

We enrolled 139 women, 69 receiving routine obstetric care and 70 discharged following treatment for abortion complications.

Hypothesis 1: after adjusting for age, social support, socioeconomic status (SES) indicators and co-morbid conditions, women who have experienced abortion complications would have a significantly decreased HRQoL

Hypothesis 2: the magnitude of the reduction in HRQoL would vary, depending on the reported availability of and/or level of satisfaction with social support

Table 1: Multivariable linear regression analyses of the association between abortion complications and EQ-5D utility score

<table>
<thead>
<tr>
<th>Variable</th>
<th>B (95% CI)</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abortion Complications (versus Routine Obstetric Care)</td>
<td>-0.001 (-0.020, 0.018)</td>
<td>0.980</td>
</tr>
<tr>
<td>Number of children</td>
<td>0.003 (0.000, 0.006)</td>
<td>0.020</td>
</tr>
<tr>
<td>Self-reported HIV status</td>
<td>0.003 (0.000, 0.007)</td>
<td>0.095</td>
</tr>
<tr>
<td>Availability of social support (SSQN)</td>
<td>0.004 (0.001, 0.007)</td>
<td>0.013</td>
</tr>
<tr>
<td>Satisfaction with social support (SSQS)</td>
<td>0.003 (0.001, 0.006)</td>
<td>0.014</td>
</tr>
</tbody>
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EQ-VAS score

<table>
<thead>
<tr>
<th>Difference (95% CI)</th>
<th>p-value</th>
</tr>
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<tbody>
<tr>
<td>Abortion Complications (versus Routine Obstetric Care)</td>
<td>-8.333 (-12.636, -4.031)</td>
</tr>
</tbody>
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No correlation between EQ-5D utility score and SSQN for either group
- abortion complications group: p = 0.18, p = 0.133
- routine obstetric care group: p = 0.11, p = 0.384

No correlation between EQ-5D utility score and SSQS for either group
- abortion complications group: p = 0.05, p = 0.711
- routine obstetric care group: p = 0.08, p = 0.555

CONCLUSIONS

- Complications resulting from induced, often unsafe, abortion are associated with significantly diminished quality of life in women in Uganda
- Social support is an important albeit complex moderator of the relationship between abortion complications and HRQoL in this setting of legal and moral proscriptions to abortion
- Limitations
  - A single center study, so generalizations should be made cautiously
  - No local language version of the EQ-5D
  - Social support is a complex construct and perceptions may vary along the course of both abortions and pregnancies
  - Unclear if differences in HRQoL persist over the longer term

REFERENCES


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