THE ROLE OF EDUCATION IN INFLUENCING FERTILITY LEVELS, OF WOMEN IN CENTRAL PROVINCE, KENYA

BY

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Introduction

• Fertility refers to the actual production of a live birth (One that after separation from its mother breathes or shows any evidence of life).

• Common measures of fertility include; the Total fertility rate (TFR), Age Specific Fertility Rates (ASFR), Crude birth rate (CBR) and the General fertility rate (GFR)
Introduction Cont..

• Kenya is among the countries that have experienced the most dramatic changes in fertility over the last 30 years.
• The TFR has been on a declining trend falling from an average of 8.1 births per woman in the 70s to the current 4.6 births per woman recorded in the recently conducted KDHS, 2008.
Fertility trends in Kenya

TFR

- 1984 KCPS: 7.7
- 1989 KDHS: 6.7
- 1993 KDHS: 5.4
- 1998 KDHS: 4.7
- 2003 KDHS: 4.9
- 2009 KDHS: 4.6
• Despite the decline, fertility levels in Kenya are still high-evidenced by the high rate of population growth-3.0% (KNBS, 2008)

• Achieving lower fertility levels for Kenya has for a long time remained a priority concern by the Kenyan gov’t.
This study was conducted in line with the govt’s efforts to identify successful measures of lowering fertility levels in Kenya.

The study recognized findings from other studies that identify a relationship between educational attainment and fertility.
The study sought to evaluate the role of education in influencing the level of fertility in Central province, Kenya.

Specific objectives were:

- To examine the relationship between education and other explanatory factors.
- To establish the relationship between education, socio-economic variables, intermediate variables and fertility.
Conceptual Framework

**Education**
- Residence
- Wealth Index
- Occupation
- Marital Status

**Background Factors**

**Proximate Factors**
- Age at marriage
- Contraceptive use
- Breast feeding duration

**Outcome**
- Children Ever Born
Data, Sources and Methodology

- The study was based on the findings of the KDHS conducted in Kenya in 2003.
- The study involved 1314 women of reproductive age (15-49 years) from Central province.
- This data source was chosen because it provided the most detailed info on the variables of study.
Data Analysis

• The data was analysed on SPSS at univariate, bivariate and multivariate level.
• The chi-square test of association was used to assess relationship between the variables at bivariate level.
• A high significance value (below 0.05) indicated existence of a relationship between the study variables.
• At multivariate level, the poison model for count data was used to further assess the relationship between the dependent and independent variables.

• The model takes the form:

\[
\text{Log}(\text{CEB}) = a + b_i \times X_i + \ldots + e_i
\]

Where \(a\) is a constant, \(b_i\) the coefficient of independent variables \(X_i\) the independent variables and \(e_i\) the error term.
Characteristics of the respondents

- Most of the respondents (55%) were aged below 29 years.
- 59.1% were married during teenage (below 20 years)
- The majority (67.1%) were currently or formerly involved in marital unions.
- The respondents were mainly residing in the rural areas (84.6%).
• More than half (56%) had attained at least the primary level of education, while 33% had attained the secondary level.
• The respondents were predominantly Christian (90%).
• Most of the respondents came from households that were categorised as rich (60.2%).
Results/Findings

• A highly significant association (P<0.05) was found to exist between the level of educational attainment and:
  ✓ A woman's age at Marriage
  ✓ Marital status,
  ✓ Occupation,
  ✓ Place of residence
  ✓ Wealth index.
Results/ Findings cont..

• Educational attainment was found not to have a significant association with contraceptive use.

• However, contraceptive use was higher among women at all levels of schooling than among women with no education.
• The findings revealed a highly significant association (P<0.05) between the number of children born to each woman and

✓ The woman’s age at first marriage,
✓ Marital status,
✓ Level of educational Attainment,
✓ Occupation
✓ Type of place of residence
✓ Wealth index
• The poison model was used to predict the number of children ever born by selected variables.

• The table below shows the findings.

• The * symbol indicates the reference category while IRR stands for the Incidence rate ratio.
## Results/ Findings Cont..

<table>
<thead>
<tr>
<th>Explanatory Variables</th>
<th>IRR</th>
<th>Significance(p)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age at Marriage</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*10-19</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>20-24</td>
<td>0.854</td>
<td>0.000</td>
</tr>
<tr>
<td>25+</td>
<td>0.818</td>
<td>0.007</td>
</tr>
<tr>
<td><strong>Contraceptive Use</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Never used</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Ever Used</td>
<td>1.188</td>
<td>0.005</td>
</tr>
<tr>
<td><strong>Education Level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*No Education</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Primary Education</td>
<td>0.748</td>
<td>0.002</td>
</tr>
<tr>
<td>Secondary</td>
<td>0.736</td>
<td>0.002</td>
</tr>
<tr>
<td>Higher</td>
<td>0.602</td>
<td>0.000</td>
</tr>
<tr>
<td><strong>Occupation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Not Working</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Professionals</td>
<td>0.950</td>
<td>0.657</td>
</tr>
<tr>
<td>Service</td>
<td>1.046</td>
<td>0.471</td>
</tr>
<tr>
<td>Agriculturalist</td>
<td>1.280</td>
<td>0.000</td>
</tr>
<tr>
<td><strong>Residence</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Urban</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td>1.104</td>
<td>0.112</td>
</tr>
<tr>
<td><strong>Wealth Index</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Poor</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Middle</td>
<td>0.931</td>
<td>0.215</td>
</tr>
<tr>
<td>Rich</td>
<td>0.838</td>
<td>0.001</td>
</tr>
</tbody>
</table>
• Contrary to the findings of other studies;
  ✓ Educational attainment was not significantly associated with contraceptive use
  ✓ There was a positive association found between contraceptive use and fertility.
  ✓ Women using contraceptives had a higher likelihood of producing more children as compared to those not using any means of contraception
Discussion of Findings

• The possible reasons for the inconsistent findings

  a) High access to information and contraceptive services in the province.
  b) The KDHS questionnaire inquired on the ‘ever use’ of contraceptives and not current use thus might have captured women who inconsistently used the contraceptives.
The level of educational attainment plays a significant role in influencing the number of CEB to a woman in Central province—as observed in the analysis, educational attainment was found to have a highly significant association (P<0.05) with all the explanatory variables apart from contraceptive use.
• The study identifies and supports education of women as a successful means of contraception—women with high levels of educational attainment are experience lower fertility levels
Recommendations..

• The government to focus more effort on improving the education sector specifically to ensure continuity of schooling for the children enrolled for schooling-thru incentives such as subsidising the cost of schooling at secondary and tertiary level.

• Sensitize popn on the importance of need
Areas of further research

• Why education was found to have no influence on contraceptive use.

• Why fertility was found to be higher among women who were using contraceptives than among those not using any methods of contraception.
Acknowledgement

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THANK YOU!