

## Helpdesk Report: Women's Literacy and the Links Between Maternal Health, Reproductive Health and Daughter Education

Date: 8 July 2010

**Query:** A quick review of the most recent available evidence available on the links between women's literacy and: maternal health; reproductive behaviour and daughter education. With a particular interest in the impact of interventions after formal schooling.

**Enquirer:** DFID UK

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#### 1. Overview

##### **Women and literacy** [www.sil.org/literacy/wom\\_lit.htm](http://www.sil.org/literacy/wom_lit.htm)

SIL states that: development agencies have found two predictable indicators for longevity among women in developing countries: accessible clean water and literacy skills. Of the 1 billion illiterates in the world, two thirds of them are women. Literate women average 2 children per family while illiterate women give birth to 6–8 children.

- Educated women are more likely to use health clinics and return to the clinic if their children's health does not improve.
- Educated women tend to begin their families at a later age and have fewer, healthier children.
- A 1% rise in women's literacy is 3 times more likely to reduce deaths in children than a 1% rise in the number of doctors.
- For women, 4 to 6 years of education led to a 20% drop in infant deaths.
- Women with more education generally have better personal health and nutrition.
- The families of women with some education tend to have better housing, clothing, income, water, and sanitation.

##### **Promoting Women's Human Resources Development through Adult Literacy Programmes**

[www.unescap.org/jecf/p07women.htm](http://www.unescap.org/jecf/p07women.htm)

The Asia-Pacific region is home to three quarters of the world's illiterate population. Illiteracy in the region is both a cause and consequence of poverty, deprivation, and under-development. It is commonly accepted that the gains of development cannot reach the general population until basic education and literacy are provided to all.

The education of women is particularly valuable as a strategic investment in human resources, as the social returns are high. The education of women and girls has a tremendous impact not only on their own development, but also on that of their families and communities. It acts as a catalyst in virtually every dimension of development and poverty alleviation, with outcomes such as reduced fertility, reduced infant mortality, improved child survival, better family health, increased educational attainment, higher productivity, and general improvement in the nation's economic situation.

## 2. Women's Literacy and Health

### **A Longitudinal Study of the Effect of Integrated Literacy and Basic Education Programs on Women's Participation in Social and Economic Development in Nepal**

Shirley Burchfield, Haiyan Hua, Dyuti Baral, and Valeria Rocha, USAID, 2002

[www.worlded.org/asia/nepal/nepal\\_12\\_19\\_02.pdf](http://www.worlded.org/asia/nepal/nepal_12_19_02.pdf)

A research programme supported by USAID in the Terai region of Nepal attempts to find out if increasing women's literacy skills through non-formal, basic education improves women's situation socially and economically. It investigates the impact of two integrated literacy programmes by examining changes for women in the following areas:

- literacy/education level
- health knowledge and practice
- participation in income-earning activities
- political awareness and participation
- community participation and
- children's education.

### **A Longitudinal Study of the Effect of Integrated Literacy and Basic Education Programs on the Participation of Women in Social and Economic Development in Bolivia**

Shirley Burchfield, Haiyan Hua, Tania Suxo Iturry, and Valeria Rocha, USAID, 2002

[www.worlded.org/docs/Bolivia10\\_26\\_02FINAL.pdf](http://www.worlded.org/docs/Bolivia10_26_02FINAL.pdf)

This study in Bolivia examined women's integrated literacy and basic education programmes run by several non-governmental organisations. It evaluated elements of the programmes and assessed their impact on women's personal development (including health and reproductive health) and ultimately on national development.

### **Rural Adult Education and the Health Transformation of Pastoral Women of Northern Nigeria**

Lantana M. Usman, *International Journal of Lifelong Education*, 28 (5), 2009

Recently, politics of education in Nigeria have shifted from urban to rural literacy, leading to the development of programmes such as the nomadic women's adult education programme. This study evaluates the extent to which the health educational objectives have been achieved and practised by the Fulani pastoral women.

The findings revealed that the objectives of the programme have been achieved in the area of personal health empowerment, knowledge and practices that minimised reproductive morbidities, fostered better family planning practices, healthier food and nutritional practices, improved hygienic and sanitation practices, and child healthcare first-aid therapies. Excerpts from the women's 'voices' are cited to support their health transformational claims.

### **Finding a Curriculum that Works Under Trees: Literacy and Health Education for Rural Adolescent Girls in Malawi**

Hogg, Angela, Berlina Makwiza, Stella Mlanga, Robin Broadhead and Loretta Brabin, *Development in Practice* 15 (5), 2005

Non-formal education often represents a last chance for adolescent girls who do not attend school to receive some education to improve their health before they become mothers. This

paper describes the development of a literacy and health education curriculum for adolescent girls in southern Malawi who will never enter formal schooling. The health messages could effect change but would have had limited impact on girls' health practices without the participation of the wider community. The curriculum's innate visibility 'under the trees' was a key factor in facilitating villagers' involvement and exponential learning.

### **The Impact of Women's Literacy on Child Health and its Interaction with Access to Health Services**

Sandiford P; Cassel J, Montenegro M and Sanchez G, *Population Studies* 49 (1), 1995  
In Nicaragua during the 1980s, thousands of adults became literate through a mass education campaign. This provided a rare opportunity to measure the impact of women's literacy on child health for women who otherwise would have almost certainly remained illiterate for the rest of their lives, and to assess whether access to health services increases or decreases the advantage conferred by education.

Results show that among the children of women who became literate exclusively by adult education, mortality and risk of malnutrition are significantly lower than among those women who remained illiterate. Furthermore, when the infant mortality rates are given approximate time locations, a sharp reduction is found following the adult education campaign, but not for the illiterate or formal-schooling groups. The survival advantage conferred by education was significantly greater among those with poor access to health services.

The results also suggest that the effect of education in reducing the risk of malnutrition operates independently of its effect on mortality, and that both are independent of wealth and their parents' decision to educate their daughters.

### **Community-based Initiatives: Success Stories from the Eastern Mediterranean Region** WHO, 2006

[www.emro.who.int/cbi/pdf/cbi\\_successtories.pdf](http://www.emro.who.int/cbi/pdf/cbi_successtories.pdf)

Poverty, illiteracy and lack of awareness all represent fundamental obstacles to health and development. Through 18 case studies, this publication aims to provide evidence to policy-makers and donors of the success of community-based initiatives.

### **Literacy for Life: EFA Global Monitoring Report 2006**

[www.unesco.org/en/efareport/reports/2006-literacy/](http://www.unesco.org/en/efareport/reports/2006-literacy/)

The EFA GMR 2006 aims to shine a stronger policy spotlight on the more neglected goal of literacy – a foundation not only for achieving EFA but, more broadly, for reaching the overarching goal of reducing human poverty. Background papers are also provided.

### **Health and Literacy in First- and Second-Generation Moroccan Berber Women in the Netherlands: Ill Literacy?**

Marrie HJ Bekker and Mina Lhajoui, *International Journal for Equity in Health* 3 (8), 2004

[www.equityhealthj.com/content/3/1/8](http://www.equityhealthj.com/content/3/1/8)

This study was aimed at investigating the role of literacy and generation in the self-reported general health status of Moroccan Berber speaking women in the Netherlands. After controlling for age, having a job, and having an employed partner, the first generation literates indeed reported significantly better health.

## **3. Maternal Health**

### **Female Education and Maternal Mortality: A Worldwide Survey**

Chryssa McAlister, BSc,1 Thomas F. Baskett, *Journal of Obstetrics & Gynaecology* 28 (11), 2006

[www.sogc.org/jogc/abstracts/full/200611\\_WomensHealth\\_3.pdf](http://www.sogc.org/jogc/abstracts/full/200611_WomensHealth_3.pdf)

This article examines the relationship between women's status and human development and maternal mortality. The Human Development Index and Gender Development Index are powerful predictors of both maternal and infant mortality rates. Female literacy rate and combined enrolment in educational programmes are moderate predictors of maternal mortality rates. Strategic investment to improve quality of life through female education will have the greatest impact on maternal mortality reduction.

#### **Maternal Literacy and Health Behavior: a Nepalese Case Study**

LeVine R.A.; LeVine S.E.; Rowe M.L.; Schnell-Anzola B., *Social Science and Medicine* 58 (4), 2004

This article addresses the question of whether literacy could be mediating the relationships of schooling to maternal health behaviour in populations undergoing demographic transition. Data analysis indicates the retention of literacy skills in adulthood and their influence on health behaviour.

#### **Social Determinants of Health**

[www.wpro.who.int/NR/ronlyres/07833FE9-0D55-40E2-A776-E8444430F00F/0/07\\_Chapter2Socialdeterminantsofhealth.pdf](http://www.wpro.who.int/NR/ronlyres/07833FE9-0D55-40E2-A776-E8444430F00F/0/07_Chapter2Socialdeterminantsofhealth.pdf)

Education is not a direct health sector issue, yet is among the most important determinants of health, especially female primary education. Studies suggest that under-5 mortality rates may be reduced by 5 to 10 per cent with every additional year of maternal education. Figure 2.2 highlights the correlation between maternal mortality and female adult literacy in 14 countries in East Asia and the Pacific.

#### **Maternal Mortality and Women's Condition: "The Distress in Being a Woman"**

J. Des Forts, *International Journal of Anthropology* 11 (2-4), 1996

[www.springerlink.com/content/d76t635757366304](http://www.springerlink.com/content/d76t635757366304) [Purchasing access]

For millenaria, maternal mortality has been considered as a fatality inherent to women's condition. Thanks to the progress of the obstetric technology, the world maternal mortality rate fell from 2,000 to 400 per 100,000 births during the past 150 years. At the same time women's condition improved chiefly because of a better level of education. This paper presents the situation of maternal mortality in relation with obstetric coverage, female literacy levels and some other socio-economic variables.

### **4. Reproductive Health**

#### **Vital Connections: Linking Women's Literacy Programs and Reproductive Health Services**

SEATS, World Education, 1999

[www.worlded.org/docs/Publications/literacy/vital\\_connections.pdf](http://www.worlded.org/docs/Publications/literacy/vital_connections.pdf)

This handbook grew out of the Women's Literacy Initiative, an effort that worked to create new and stronger links among women's literacy programmes, the local and international agencies that sponsor them, and the international family planning and reproductive health community. The book builds the case for establishing an integrated health/literacy programme and offers steps to do so.

#### **Adolescent Girls' Literacy Initiative for Reproductive Health (A GIFT for RH)**

USAID

[www.childtrafficking.com/Docs/adhikari\\_r\\_et\\_al\\_adolescent\\_girls\\_literacy\\_initiative\\_for\\_reproductive\\_health\\_7.pdf](http://www.childtrafficking.com/Docs/adhikari_r_et_al_adolescent_girls_literacy_initiative_for_reproductive_health_7.pdf)

The goal of the 'Gift for RH' (the Adolescent Girls Initiative for Reproductive Health) project aimed to increase the ability of illiterate and out-of-school adolescent girls to make and to act on informed decisions regarding their reproductive health and rights as well as to make the community and their peers aware of the same. This survey was conducted to determine if this non-formal education programme could provide the knowledge needed to do so.

### **Improving Refugees' Reproductive Health through Literacy in Guinea**

T. McGinn; K. Allen, *Global Public Health* 1(3), October 2006 [purchasing access]

[www.informaworld.com/smpp/content~db=all~content=a755295875~frm=titlelink](http://www.informaworld.com/smpp/content~db=all~content=a755295875~frm=titlelink)

Adult literacy programmes, particularly literacy-for-health programmes that integrate health material in their curricula, are gaining momentum as a means to improve women's and children's health and increase women's empowerment. However, the relationship between literacy skills and these benefits remains unclear.

This paper presents results from a study on the Reproductive Health Literacy (RHL) Project among Sierra Leonean and Liberian women in refugee camps in Guinea. Literacy classes focused on safe motherhood, family planning, STIs/HIV/AIDS and gender-based violence. Results indicate that participants had a high level of reproductive health knowledge after participation, and reported an increase in literacy skills.

### **Does Women's Literacy Affect Desired Fertility and Contraceptive Use in Rural–Urban Pakistan?**

Khalida P. Zaki and Nan E. Johnson, *Journal of Biosocial Science* 25:445-454, 1993

<http://journals.cambridge.org/action/displayAbstract?fromPage=online&aid=1639596>

The 1984–85 Pakistan Contraceptive Prevalence Survey showed that urban wives had more than twice the literacy rate of rural wives. This study explored the relationship of the rural–urban gap in female literacy to differences in contraceptive use. It concludes that raising the literacy rate in rural Pakistan would not narrow the rural–urban gap in contraception to cease childbearing but would narrow the rural–urban gap in contraception used to space wanted births further apart. Recommendations for government policy are made.

### **Empowering Women, Developing Society: Female Education in the Middle East and North Africa**

Farzaneh Roudi-Fahimi and Valentine M. Moghadam, 2003

[www.prb.org/Publications/PolicyBriefs/EmpoweringWomenDevelopingSocietyFemaleEducationintheMiddleEastandNorthAfrica.aspx](http://www.prb.org/Publications/PolicyBriefs/EmpoweringWomenDevelopingSocietyFemaleEducationintheMiddleEastandNorthAfrica.aspx)

Education is a key part of strategies to improve individuals' well-being and societies' economic and social development. In the Middle East and North Africa, access to education has improved dramatically over the past few decades, and this report highlights a number of encouraging trends in girls' and women's education.

## **5. Daughter Education**

### **Role of Parental Literacy in Explaining Gender Difference: Evidence from Child Schooling in India**

Uma S. Kambhampati and Sarmistha Pal, *The European Journal of Development Research* 13 (2), 2001

This article examines gender differences in child schooling in rural West Bengal, using indicators of school enrolment and attainment at the primary level. There is significant evidence that paternal and maternal education explain gender differences in both school enrolment and attainment: while father's education has a significant impact on both boys' and girls' education at the primary level, mother's literacy has greater impact on the chances of daughters being educated than sons. In other words, when mothers have bargaining power, in this case via education, they are likely to increase collective household welfare rather than to perpetuate discriminatory practices.

### **Formal and Nonformal Education: Exploiting the Synergy Between them for the Benefit of Both**

World Education's Integrated Education Strengthening and Adult Literacy Program in Mali  
Souleymane Kante, 2005

[www.worlded.org/docs/Publications/girlsed/mali\\_unesco\\_case\\_study.pdf](http://www.worlded.org/docs/Publications/girlsed/mali_unesco_case_study.pdf)

This non-formal basic education programme provides literacy classes for parent association members at the community level. At the same time, the programme has also had a broader impact: health issues are addressed, particularly the importance of immunisations, birth spacing and HIV prevention. Classes have increased parents' ability to follow their children's progress in school and have helped men to recognise the importance of school for their wives and daughters.

## 6. Additional information

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