



# A SNAPSHOT OF POOR ADOLESCENT GIRLS' NUTRITION AND RELATED ISSUES IN PAKISTAN

STUDYING THE KNOWLEDGE, BELIEFS AND PRACTICES OF UNMARRIED AND MARRIED ADOLESCENT GIRLS WITH RESPECT TO NUTRITION AND ON THE SOURCES OF NUTRITION INFORMATION THE ADOLESCENTS HAVE ACCESS TO AND USE



Implemented by Fatima Memorial Hospital (FMH)

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SUMMARY REPORT

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## **DECLARATION**

We/I have read the report titled: “A Snapshot of poor adolescent girls’ nutrition and related issues in Pakistan” and acknowledge and agree with the information, data and findings contained.



For RAF Declaration

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## **EXECUTIVE SUMMARY**

The special significance of adolescent girls' health, nutritional and social status for the achievement of Millennium Development Goals (MDGs) 4 and 5 is being brought increasingly under focus at the global level. According to a UNFPA and Population Council report, the MDGs along with the Convention on the "Elimination of All Forms of Discrimination against Women" and the Convention on the Rights of the Child – provide a framework of values and desirable actions with respect to children and adolescents. None of these goals can be achieved without substantial and prioritized investment in vulnerable and marginalised adolescent girls. Adolescence is a period which is critical for developing capabilities in children of both genders and it is in this period that the girls experience heightened vulnerability. In Pakistan like other South Asian countries, girls have a comparatively low social status, are marginalised and are unable to avail opportunities restricting their socio-economic empowerment. The two major adverse manifestation of adolescent girls' disempowerment are their early marriages and poor nutritional status.

Early marriages of girls have adverse health consequences due to teenage pregnancies and births. Adolescent and teenage mothers from poor and marginalised communities contribute significantly to maternal, newborn and child mortality and morbidity. As regards infant and child mortality, according to a UNFPA 2007 report "one million babies born to adolescent mothers will not make it to their first birthday and several hundred thousand more will be dead by age 5". Despite the large number of targeted Maternal, New-born and Child Health (MNCH) interventions over the last decade, Pakistan is still struggling to achieve MDGs 4 and 5 which call for reducing the country's Infant Mortality Rate (IMR) to 40, under 5 Mortality Rate (U5MR) to 52 per 1000 live births and Maternal Mortality Ratio (MMR) to 140 per 100,000 live births.

Malnutrition is a major contributor to the poor maternal and new born outcomes of teenage pregnancies and child births. Adolescence is a critical phase of human lifecycle during which physical, psychosocial and hormonal development occurs. During adolescence there is accelerated linear growth along with increases in body weight and changes in body composition. Also approximately half of adult bone mass is obtained during this period. Inadequate and poor dietary intake during this period prevents attainment of full physical development. For girls this results in stunting and incomplete development of pelvic bones along with anaemia and micronutrient deficiencies which result in pregnancy complications and obstructed deliveries.

To accelerate progress towards the achievement of MDGs 4 & 5, Pakistan needs to adopt a holistic approach with due focus on the complex interrelated socio-cultural, biological and health services related factors responsible for the health and nutritional well-being of women generally and adolescent girls specifically. MNCH policies and programmes need to recognise these factors and devise short, medium and long term strategies to address them effectively. For this

purpose good quality research generated evidence is required. Most research undertaken in the field of MNCH in Pakistan is quantitative and focused on women of childbearing age and children. 'Adolescent girls'-specific research is scarce. This has created a knowledge gap in MNCH policies and strategies in the context specific to adolescent girls and more so poor and marginalised adolescent girls.

The study being reported was undertaken with the purpose of generating data to strengthen advocacy for improving existing health and MNCH policies and strategies and for improving the training curricula of community health workers to increase their capacity for more focused and effective health and nutrition counselling of adolescent girls and their families. The target population was poor adolescent girls aged 15-19 years, both married and unmarried from the four major provinces of the country. The aim of the study was to generate evidence on the nutritional status, knowledge, beliefs and practices of unmarried and married adolescent girls and the sources of nutrition information that adolescents have access to and use.

## **Methodology**

For the quantitative component of the study multistage stage sampling was done to select a total of two hundred adolescent girls; one hundred each unmarried and married, from each province of Pakistan. The provinces included Balochistan, Khyber Pakhtunkhwa (KP), Punjab and Sindh. One district each was in the study provinces on the basis of being security wise safe and logistically convenient for the study provincial collaborating partners. The selected districts were Quetta in Balochistan, Kohat in KP, Chakwal in Punjab and Sukkur in Sindh. . Random selection of one union council in each selected district was made and then two urban and two rural sites were randomly selected from each selected UC. Fifty poor households were selected in each selected urban and rural site using the cluster sampling method. Quantitative data included the adolescent girls' households' socio-economic status data and the adolescent girls' social and financial empowerment data to provide context to the nutritional status, dietary patterns and dietary information and beliefs of the study adolescent girls. Since the main purpose of the study is to advocate for a specific focus on adolescent girls nutrition and health in Maternal, Newborn and Child Health Policies and strategies, some data related to reproductive health was also collected from the selected married adolescent girls.

Purposive sampling of adolescent study girls, their family and community members, school teachers, health services providers and health and nutrition managers in the selected households, districts and provinces was done for in-depth interviews (IDI) and focus group discussions (FGDs) to record their views on the social status, financial empowerment and nutrition needs and concerns of adolescent girls and the response of the current policies and programmes to these needs. Their suggestions and recommendations were recorded for enhancing the social, reproductive health and nutritional status of marginalised adolescent girls.

## Results

This study has documented low literacy, low age at marriage, low employment and financial disempowerment of poor adolescent girls. These indicators confirm the low social status of the study adolescent girls.

The study has found a positive association between education and age at marriage and literacy status and number of children borne by the married adolescent girls.

**Household spending on food:** In Balochistan 20%, in KP 80%, in Punjab 32% and in Sindh 8-10% of the adolescent girls' households spend  $\geq 75\%$  of their income on food.

**Household food shortages:** In Sindh 62%, in Punjab 50%, in KP 15% and in Balochistan 32% households have experienced frequent or occasional food shortage in the last year.

**Daily number of meals:** Overall 25% of unmarried and 30% of married girls' households have two meals or less per day. In Punjab 30%-40%, in Sindh 32%, in KP 12% and 22% unmarried and married girls' households respectively and in Balochistan 25% of households have two meals or less. Breakfast and/or lunch are the most frequently meals missed.

**Hunger:** Overall 60% of both unmarried and married girls said they never had enough food to eat. In Balochistan and Punjab 80% each married and unmarried girls never had enough food.

### **Dietary patterns, opinions and sources of nutrition information:**

- Poor adolescent girls, their households and community members are generally aware of the enhanced nutrition needs in the adolescent period. Poverty and lack of understanding of food substitution prevents them from providing healthy diets to the girls.
- Access to quality foods is limited. Meat, eggs, dairy products and lentils are eaten 3 times or less a month by a large proportion of the households. Mean daily calorie intake of the study adolescent girls came to 1500 Cal.
- Some knowledge of dietary supplements was found among amongst 88% of both categories of study adolescent girls and dietary supplements are taken by 22% of unmarried and 38% of married girls.
- Main sources of nutrition advice and information are parents and siblings (70% for unmarried girls) and in-laws (55% for married girls). Health workers are the source of information for 2% unmarried girls and 11% married girls overall.
- School teachers are accessible to 62% of unmarried and 50% of married girls but they are not consulted for health and nutrition advice by 70% of the unmarried and 95% married girls to whom they are accessible.

### **Nutritional status:**

- When ranked according to weight for age, 45% of the unmarried and 72% of the married study adolescent girls overall are found to be in the lowest quartile.
- On height for age ranking 78% of unmarried and 72% of married are in the lowest quartile.
- Twenty eight percent of unmarried and 16% of married girls were found to have MUAC measurement of <23 cm. While there is no agreement on cut off measurement of MUAC in adolescent girls, some studies have given measurement below 23 cm as predictors of pregnancy complication.
- The body mass index (BMI) of the study adolescent girls puts 18% of the unmarried and 12% of the married girls in the thin and severely thin categories.

#### **Access to health professionals:**

- Overall 60% of the study adolescent girls were found to have access to Lady Health Workers (LHWs), 8% unmarried and 12% married to lady doctors and 2% in each category to both.
- For 58% unmarried and 52% married a nearby health facility is available. The nearby health facilities are private hospitals (34%) and Basic Health Units (34%) for both categories of girls.
- Forty percent of both married and unmarried girls have never visited their nearby health facility.

#### **Reproductive health related opinion and practices:**

- Among the total 379 married adolescent girls, 247 (65%) have experienced pregnancy with 5.6% primigravida, 55% having borne one child, 28% two children, and the rest three children or more (maximum 5 children).
- Mean age at first pregnancy is 16.44 years overall. Balochistan has the lowest mean age at marriage of 16.18 years while Sindh has the highest of 16.45 years.
- Forty four percent of the study married girls are not in favour of family planning; In Balochistan 35%, KP 45%, Punjab 12% and Sindh 76% are not in favour of women practicing family planning. In Balochistan 55%, in KP 22%, in Punjab 40% and in Sindh 75% of the families and communities are not in favour of family planning. Sindh has the highest proportion (90%) of girls unwilling to use contraception. Overall 80% are not using any contraceptives; 95% in Sindh, 70% in KP, and 80% each in Punjab and Balochistan.
- Thirty five percent of the married girls are not in favour of visiting health facilities for antenatal care and 30% want antenatal care from lady doctor.
- For 65% the preferred place of delivery is hospital. About 30% prefer home delivery.

#### **Discussion and Conclusions**

This study was aimed at documenting the nutritional status, nutrition knowledge, beliefs and sources of nutrition information of poor adolescent girls both married and unmarried for the purpose of bringing them under focus in MNCH and youth related policies and strategies. The

background household data and the study girls social status and financial empowerment data clearly indicate their poverty, low social status and lack of financial empowerment. Poverty is a barrier to access to good quality nutritious foods and also severely restricts food choices. Lack of education is related to deficient knowledge of good foods and dietary needs. A study in rural Bangladesh on adolescent girls' nutrition reported positive correlation between less frequent consumption of non-staple good-quality food items with the household asset quintile. Girls of the highest asset quintile ate fish/meat 2.1 (55%) days more and egg/milk two (91%) days more than the girls in the lowest asset quintile (Alam, Roy, Ahmed, & Ahmed, 2010). The study findings of high prevalence of food insecurity, high proportion of income spent on food, poor dietary patterns and inadequate dietary intake among the study adolescent girls' households are not surprising. The girls' poor nutritional status is also not unexpected. What is of note is the high prevalence of overweight and obesity and the fact that overall and across provinces only about 10-12% of the study girls have a normal BMI. The under-nutrition data has implications for their reproductive health and pregnancy outcomes and achieving the Maternal, Newborn and Child Health (MNCH) and Millennium Development Goals (MDGs) of the country. The overweight and obesity findings have implication for their risk of acquiring chronic diseases and increasing the chronic diseases burden in the country.

The above findings along with the study girls and their families' unfavourable opinion of family planning, antenatal care and access to and utilisation of health services and their low use of contraceptives add to the uncertainty of achieving family planning and reproductive health and MNCH targets and goals of the country. At the current high rate of adolescent marriages, confirmed again by this study, 50% of all pregnancies are likely to be among adolescent mothers by the year 2030. Therefore there is a clear need for specific focus on improving adolescent girls' social and nutritional status in all relevant health, education and social welfare policies and strategies.

## **Conclusion**

From the findings of this study it can be concluded that:

- Poor adolescent girls have low social status and are marginalised as indicated by their low literacy rates, low age at marriage and financial disempowerment.
- Food insecurity, hunger, poor diets and malnutrition are prevalent in poor households and among poor adolescent girls
- The poor adolescent girls, their household members and community members have understanding of the enhanced nutritional needs in adolescence and families' practices on access to nutrition are not generally discriminatory against girls. Nevertheless the girls' diets are poor quantitatively and qualitatively owing mainly to poverty and lack of knowledge of food substitutions.

- Household members are the main sources of the girls' nutrition and health information. LHWs and other community services providers including school teachers are currently not playing any role in the promotion of adolescent girls' health and nutrition. However they are available to the community and have the interest and potential of creating awareness and providing counselling services on regular basis.
- A high proportion of married adolescent girls, their families and communities have unfavourable opinion of family planning and the use of contraception is very low at less than 20% compared to the national rate of 35%.
- While access to health workers is present, the utilisation of the services of community based health care providers like LHWs and Community Midwives (CMWs) is low. Awareness about their availability and satisfaction with the services provided by them is lower in rural areas as compared to urban areas. Hardly any married adolescent girl mentioned them as their source of health and nutrition advice or their preferred consultants for antenatal care.
- Health and nutrition services providers need better and continuing nutrition training and education and counselling skills to be effective in creating nutrition awareness and behaviour change.
- Current health policies and programmes need to recognise adolescent girls' needs and concerns and develop effective strategies for reaching out to them.

## Recommendations

The recommendations given below are based on the findings of this study and recommendation made by health managers and services providers in interactions with them during the course of the study and in the provincial dissemination seminars. Recommendations of the Adolescent Girls' Advocacy & Leadership Initiative (AGALI) relevant to Pakistan's situation and in line with the findings of this study have also been incorporated (Fewer, Ramos, & Dunning, 2013). Recommendations given can be incorporated in the provincial youth development policies and strategies and implemented in coordination by the relevant public sector departments including youth affairs, education, and social welfare etc. and NGOs.

### 1. Nutrition and health promotion

- Current policies and programmes must include poor adolescent girls' nutrition and health as specific areas of focus. Strategies must focus on awareness creation and behaviour change at the household and community level.
- Policies and programmes in the development phase or to be developed must recognise the specific needs of poor adolescent girls and their implementation strategies must extend to the household level and community levels to reach these girls.
- **Community health services providers as change agents:** The community health service providers need to be recognised as agents for change and their capacities developed as promoters of and counsellors on nutrition and health to adolescent girls and their households. While the current training programmes transfer knowledge to the services providers they fail



to develop their capacity for applying and adapting the knowledge to specific situations. This was evident from the IDIs held with services providers who appear to be recommending foods to poor families like milk, eggs, chicken and fruit, which are beyond their financial capacity. The health services provider need to understand the nutritional value of inexpensive and easily available food items and their combinations to be able to make more practical suggestions for the improvement of dietary intake.

- **Training of school teachers and involvement of schools in awareness creation, capacity building and overall community development activities:** School teachers as community members are available to the adolescent girls even if they are not school going. They have some knowledge of health and nutrition and are generally respected by the community. Additionally with the increasing recognition of school health programmes a number of them will be getting training of school children health and nutrition. Therefore LHWs and MNCH programmes must link up with school teachers and schools to scale up awareness creation and nutrition and health promotion. Volunteer female school teachers can be trained and encouraged to reach out to out of school adolescent girls. Schools have the facilities of space and infrastructure to undertake and/or facilitate, with community participation, nutrition and lifestyle change awareness creation activities and capacity building activities.
- **Capacity building of health professionals working in health facilities:** Health care providers and health facilities need to develop their capacities to provide technical leadership to nutrition and health promotion activities at the community level. They can develop training curricula and trainers and facilitators for training activities of all different types of stake-holder mobilised by programmes for awareness creation and behaviour change of households and communities.
- **Coordination and integration of all adolescent girls' empowerment and health and nutritional status promotion activities:** Local governments are best placed to provide, integrate, coordinate, supervise and monitor all activities at the community level. Capacity building for undertaking this role and responsibility must be developed among the officials and employees to local government.

## 2. Economic Empowerment for Adolescent Girls

The recently developed youth policies by the provinces do not recognise poor adolescent girls as a specific component of the youth populations with very different needs from the middle class youth they are focusing on. These following recommendations from AGALI need to be incorporated in the youth policies and programmes. AGAL recommends three strategies for the economic empowerment of adolescent girls: financial services, employment, and life-skills and social support (Fewer, Ramos, & Dunning, 2013).

- **Creation of Age-Appropriate Financial Services:** This includes development of financial literacy and youth savings programmes relevant for all ages and provides a critical base for

future economic advancement. Microcredit strategies are more appropriate for older adolescent girls and young women who have the mobility, resources, and social support to launch small businesses.

- **Link Employment Programmes with Real Market Needs and Opportunities:** Develop Programmes that offer adolescent girls vocational training and employment opportunities. This approach requires designing a quality training process that builds girls' technical and soft skills. These programmes should also help address any health and social obstacles that negatively affect a participant's ability to work, such as lack of participation in the public sphere, early marriage, and adolescent pregnancy. In Pakistan where girls' mobility is restricted, innovative ways of reaching out to them need to be developed. One such way could be the enrolment of an older person from the household along with the target adolescent girl may ensure better participation in the programmes. Skills development for work which can be done at home may have better acceptance.
- **Address the Intersection of Factors that Shape Girls' Lives:** An integrated approach considering adolescent girls' overall well-being is critical to achieving economic empowerment. Programmes should combine life-skills training and social support with strategies to promote access to financial services and employment need to be developed. Organising the trainings at sites accessible from their homes and acceptable to the families will have more uptake. Reproductive health and leadership training as well as financial training and job guidance can be integrated into the skills development programmes.
- **Create Data-Driven Programmes:** Data should be a core component of girls' economic empowerment initiatives throughout programme development, implementation, monitoring, and impact assessment stages. To customise the programmes formative research on adolescent girls' needs and preferences should be made part of the programmes. Finally, organizations should measure short and long term programme outcomes to both assess impact and build the field's knowledge of successful models, as existing evaluations in the field are very limited.



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