Menarche and Its Implications for Educational Policy in Peru

La Red Nacional de Promoción de la Mujer

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Girls' and Women's Education Policy Research Activity

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EXECUTIVE SUMMARY

Indigenous girls in rural areas live in the most extreme poverty and make up the least educated groups in Peru. These girls face numerous constraints to obtaining an education. Enrollment rates are lower for girls in rural areas, and their grade repetition rates are higher than those for boys. Adolescence is particularly difficult, as girls face a number of risks during this time. Once they begin menstruation, completing their primary school education is a formidable challenge, and opportunities for advancing to secondary school are limited. The research presented here examines barriers to education encountered by rural girls when they reach menarche.

This study was carried out by the Girls' and Women's Education Policy Research Activity (GWE-PRA), with funding from the United States Agency for International Development (USAID), Office of Women in Development. The overall goal of the Girls' and Women's Education Policy Research Activity is to carry out analytic studies on girls' and women's education programs and pilot programs to determine their impact on social and economic development. Other important goals are identifying cost-effective elements of those programs and sharing research findings with a broad stakeholder audience, including decision makers. GWE-PRA is a component of the Girls' and Women's Education Initiative, which was launched in 1995 to spur rapid further advances in girls' and women's education.

The research was conducted in Ayacucho, a Department in the Andean region of Peru. The objectives of the research were (1) to assess the extent to which the onset of puberty acts as a barrier to girls' primary school attendance and completion, and (2) to inform local decision makers and donors and enable them to better design and implement policies and activities that address the constraints on girls' completion of primary education. To achieve these objectives, three questions were addressed:

- 1. What role does puberty (and menarche as a visible sign of puberty) play in girls' attendance and retention in school?
 - (a) What factors in the family and community affect adolescent girls' attendance and retention in school?
 - (b) What aspects of puberty are key to girls' decisions to withdraw from school?
- 2. How can barriers related to puberty best be addressed through policy and program reform and implementation?
- 3. Who are the best people, organizations, or sectors to address these barriers?

The GWE-PRA Peru research design employed both qualitative and quantitative methods of data collection. However, the data are largely qualitative in nature, utilizing

ethnographic research techniques. A total of 28 focus group discussions were carried out with separate groups of boys, girls, fathers, and mothers. Additionally, 122 surveys were administered to 51 boys and 57 girls in the sixth grade, 7 girls (age 12 to 16) in selected districts, and 7 boys (ages12 to 16) in selected districts. Individual interviews were conducted with 14 community leaders (7 male and 7 female), 7 girls (age 12 to 16) who had never entered school, 7 girls who had completed primary school, and 7 health center personnel. Seven elementary school teachers (1 female and 6 males) in the capitals of districts in the selected rural communities were also interviewed. Observations were carried out in seven classrooms, using detailed observation guides.

Because the sample was purposively selected, it was not appropriate to carry out statistical tests requiring the assumption of random selection nor could generalizations be made to the larger population outside the realm of identified criteria. It is unknown, for example, whether similar responses would be obtained in large urban areas of Peru, where girls have much greater access to information, facilities and sanitary products. Additionally, in the Andean communities, few people talk about menstruation (the majority of the girls do not talk about this subject with their parents or their teachers). While many of the questions asked in this study were very personal in nature, the researchers were experienced interviewers and were familiar with the areas in which they were working. Some had previously worked with ReproSalud (a local health-related project) and the RNPM in the area, and the trust and rapport necessary for honest discussions were already established. Hence, it is reasonable to assume that the respondents provided accurate information and expressed genuine opinions.

Although this qualitative approach does not provide the basis for conducting statistical analyses, it contains rich explanatory data that provide valuable insight about the issues surrounding girls' menstruation, girls' experience of menstruation, and the effect of these factors on their school attendance and performance.

Study results showed that the onset of puberty has a negative impact on girls' participation in primary school in Ayacucho. Menarche, as the most dramatic sign of puberty, affects a girl in both how she perceives herself and how she is perceived by those in her environment. In addition, the formal education system does not accommodate the needs of menstruating girls.

Interviews with girls revealed a number of ways in which girls' perceptions of themselves change once menarche occurs. Girls begin to view themselves as women, with both positive and negative feelings about the changes brought about by menarche. For girls in rural areas of Ayacucho, menarche produces physical, emotional, and social changes that significantly alter their lives and affect their schooling. These changes are accompanied by a substantial increase in responsibilities as girls assume a much larger share of the domestic and farming chores.

Menarche and ongoing menstruation also produce changes in how a girl is perceived by her family and community, whose members consider menarche a symbol of her transition from girlhood to womanhood. Her status as a resource for her family becomes accentuated.

After menarche, the community often sees a female as a sexual object, with accompanying expectations that she take a subordinate role in her relationship to men.

However, she is also viewed as potent because she can become pregnant and engender life. Beliefs persist that the touch of a menstruating girl or woman can wither plants and make babies sick.

The GWE-PRA study found that formal education is not accommodating of the needs of menstruating girls. Physical discomfort and unpleasant feelings (odors and soiled clothing) experienced during menstruation lead to school absenteeism and a perception of the need to stay at home. Menstruating females are thought to possess special powers as well as greater vulnerability. Girls often remain at home after menarche because of the belief that during menstruation women are fertile. They stay at home to protect themselves from the possibility of getting pregnant or being sexually abused.

The school environment makes it difficult for girls to attend and participate in school during menstruation because of the lack of bathroom facilities, water, and sanitary supplies, as well as the distance from home to school. Findings indicate that school rules and regulations (such as the requirement to participate in certain physical exercises) do not always respond to girls needs. The discomfort caused by menstruation, aggravated by anemia and malnutrition, contributes to poor school performance and absenteeism, which may result in dropping out of school.

Menarche also signals the time at which girls may abandon school altogether. Socially it signifies the end of childhood for girls. Their female roles are reaffirmed, and they begin to focus more attention on the domestic tasks usually relegated to women. Beliefs that women do not need to continue their studies affect pubescent girls. Girls are seen as suitable or fit for having sexual relations and conceiving. They are at risk of sexual abuse. It is believed that their sexuality should be controlled and protected.

This study identified a range of policy options for addressing problems associated with menarche and menstruation. Some of the recommended actions require the allocation of additional resources by the Ministry of Education or contributions from community members; others necessitate changes in policy. Among the options are those that address the physical barriers posed by menstruation, for example, assuring that all school girls have access to (1) latrines with separate facilities for girls and boys, (2) running (preferably potable) water for washing, and (3) free or subsidized sanitary napkins. Separate schools for girls might address some of the most serious issues associated with menarche, such as painful teasing from boys, shame associated with odors or soiled clothing and cultural beliefs that once girls have begun to menstruate, they no longer need to study.

Input from a variety of sources may be needed to implement these strategies. For example, the appropriate government authority might provide additional funding for building latrines and supplying running water, and community members may be able to contribute labor and local materials for building. Free or subsidized sanitary products might be provided

through a combination of sources, including the Ministry of Education, donor agencies, businesses, nongovernmental organizations (NGOs), or local health centers.

However, as interviews and focus group discussions have shown, even where resources are provided, they may not be sufficient to change girls' behavior. Resources must be accompanied by information about the important health and safety benefits accrued from using these services. Instruction could take the form of group discussions with girls and health care workers, classroom instruction by teachers, and/or instructional pamphlets.

Another option is to implement a school policy allowing girls to be exempt from physical education during menstruation in the absence of sanitary products and bathroom facilities. However, even when such resources are available to girls, it may still be difficult for girls wearing skirts to carry out gymnastic exercises during their menstrual periods.

Alternatives for addressing girls' health issues related to menstruation and reproduction include providing improved instructional materials and better-trained teachers to dispel misconceptions about reproductive health, such as those linking menstruation and fertility. An option for increasing girls' safety at school is to alter the school schedule in remote areas so that classes end earlier in the day. This should be carried out in close consultation with local stakeholders, including parents, teachers, and the children themselves.

At the community level, actions to increase girls' safety include establishing a neighborhood watch, involving community members in following up on gender-related violence, and providing adult education on issues of sexuality, sexual abuse and domestic violence. Additionally, various measures are suggested to help girls overcome the negative impact on their schooling associated with increased household responsibilities once they reach menarche. Recommendations include using public awareness campaigns and community meetings to educate families and community members about the importance of girls' education and the effects of increased household responsibilities on their education. Recommendations also address alleviating problems caused by malnutrition and anemia (often exacerbated by menstruation). These include carrying out research in rural areas on the relationship between menstruation and nutrition, providing school breakfasts and iron supplements.

Finally, it is recommended that coordination and collaboration between institutions and organizations in the Ayacucho region continue and that existing relationships are strengthened among private and public sector institutions that carry out initiatives to improve education. For example, the incorporation of additional NGOs into the Ayacucho-based local girls' education network will increase the probability that increased efforts will be directed toward improving the education of school-age and adolescent girls.

To achieve ownership of and support for possible solutions, it is proposed that these findings and recommendations be discussed in public forums attended by a wide variety of stakeholders, including girls, parents, teachers, community leaders and government officials at the district,

regional, and national levels. For each proposed solution, the costs and benefits, as well as the possible implementing entities (e.g., Ministry of Education, NGOs) should be determined in conjunction with local stakeholders.

ACRONYMS AND ABBREVIATIONS

APAFA Asociación de Padres de Familia (School Parents' Association)

EAP entrevista a profundidad (in-depth interview)

GER gross enrollment ratio

GWE Girls' and Women's Education Activity

GWE-PRA Girls' and Women's Education Policy Research Activity

INEI Instituto Nacional de Estadística e Informática (National Institute of

Statistics and Informatics)

m.a.s.l. meters above sea level

NER net enrollment ratio

NGO non-governmental organization

PAR Programa de Apoyo al Repoblamiento (Program to Support Repopulation)

PRONAA Programa Naciónal de Asistencia Alimentaria (National Program of Food

Aid)

S/E sin educación (without education)

SES socioeconomic status

USAID United States Agency for International Development

WHO World Health Organization

1. INTRODUCTION

1.1 Girls' Participation in Education

Research indicates that important personal, social, and economic benefits accrue from educating girls. In addition to increasing the duration of their own lives and improving the health of the children they bear, educating girls has been shown to further the education of succeeding generations. Educated mothers are more likely to send both girls and boys to school and keep them there longer. Educating girls also contributes to a country's economic growth by improving women's participation in wage employment and in-home and nonmarket production. In addition, the more educated a girl is, the less likely she is to experience an unwanted early pregnancy. Worldwide, notable gains in girls' educational attainment were made during the past four decades. From 1960 to 1994, primary enrollments for girls increased in every geographic region in the developing world.

Despite progress toward increasing enrollments, girls' participation in education lags behind that of boys, and many school-age girls still lack access to schooling. Gender continues to be a major factor in determining who goes to school, how well they do and how far they progress (Tietjen, 1991). Of the children who never go to school or who drop out before completing school, two-thirds are girls (UNICEF, 1997).

1.2 Barriers to Girls' Participation

Much has been written in recent years about the barriers that prevent girls from fully participating in the education system. Some researchers classify these factors (and interventions that address them) into categories of *supply* and *demand* (Bustillo, 1993; King and Hill, 1993; Lockheed et al., 1991; McGinn and Borden, 1995; UNICEF, 1992). Tietjen (1991) further classified supply and demand factors contributing to girls' lower participation in education into categories of (1) macrolevel societal factors, (2) education system and school factors, and (3) social and household factors.¹

According to this typology, *macrolevel* societal factors include national wealth, degree of industrialization, level of development, degree of urbanization, and religion. Supply-side barriers stem from an insufficient number of schools, teachers, textbooks, and other resources. Although availability of school places is determined by *supply* factors, the extent to which girls gain access to these places may be affected largely by factors related to the *demand* for educational services. Demand factors encompass a wide range of variables, including family income, direct and indirect² costs of schooling, opportunity costs (income or labor that is lost to a household because a child goes to school), distance to school, concerns about safety, and cultural expectations that girls will marry early and have children and thus, do not need further education.

¹ This typology is based on prior work, including: Bowman and Anderson (1980), El-Sanabary (1989), Tilak (1989), and others

² Direct costs include school fees, uniforms and textbooks; indirect costs include items such as transportation and clothing.

Demand is further reduced when the perceived benefits are low. According to McGinn and Borden (1995), parents are more likely to enroll children whom they perceive as having high potential. For example, parents may withdraw children who fail because they believe that the child is unlikely ever to succeed. Parents who do not see the relevance of education may be reluctant to send their children to school.

Anderson (1988) contends that demand for education is seldom determined by a single factor but results from the interaction of many factors. For example, the lack of job opportunities for females, combined with fears about their safety and the need for their labor at home, may work together to prevent parents from sending their daughters to school.

Table A1 in Appendix 1 highlights many barriers to girls' schooling, as well as examples of research related to these barriers in various countries. This table is illustrative rather than all-inclusive, showing key research findings on these factors.

1.3 Girls' and Women's Education Policy Research Activity

1.3.1 Overview

Based on evidence that primary school completion by girls has a significant impact on developing countries' long-term social and economic development, USAID launched the Girls' and Women's Education Initiative in 1995 to spur further rapid advances in girls' and women's education. The end goal of the initiative is to raise girls' primary school completion rates by 20 percent in selected countries. This goal is to be achieved by mobilizing developing country decision makers, including religious leaders, government officials, private sector representatives, and the media, to work with each other, creating their own solutions with their own resources.

The GWE-PRA, implemented by World Education in collaboration with Harvard Graduate School of Education and the Education Development Center, is part of this initiative. Its primary objectives are these:

- 1. To carry out analytic studies on girls' and women's education programs and pilot programs to determine their impact on the country's social and economic development;
- 2. To identify the cost-effective elements of those programs; and
- 3. To share research findings with a broad stakeholder audience, including decision-makers.

GWE-PRA is carrying out these objectives in three of the four countries in which it is working (Bolivia, Honduras, and Nepal). In the fourth country, Peru, GWE-PRA is

designed to assess the impact of menarche and menstruation on girls' participation in primary school.

In general, the research findings of the GWE-PRA activity are expected to help planners at the national level and in international assistance agencies make more informed decisions about the allocation of resources for programs that affect the country's development. In addition, findings will help the private and public sectors develop more appropriate programs tailored to local needs.

1.3.2 Girls' and Women's Education Policy Research Activity in Peru

In Peru, the USAID Mission, the Ministry of Education, international and national NGOs, and other members of the development community have identified early adolescence as a time of risk and vulnerability for girls in the educational system. In addition to the numerous barriers girls face in attaining an education, they encounter new constraints during this time. Adolescent girls in all developing countries face risks that are unique to females at this stage of life. Social and economic forces leave them especially vulnerable to sexual or physical abuse, to marriage and childbearing at a young age, to an increase in domestic and agricultural responsibilities, to commercial sex trafficking, to HIV/AIDS and other sexually transmitted infections, and to lives devoid of the benefits of education. Once girls (especially those in rural areas) begin menstruation, completing their education poses additional challenges that include overcoming misconceptions about menstruation and biological functions and coping with the physical problems posed by lack of access to toilet facilities or sanitary products.

Peru is a USAID Girls' and Women's Education Initiative emphasis country because of serious constraints on girls' successfully acquiring a basic education. Anecdotal evidence suggests that the onset of puberty is a barrier to girls' primary school completion in Peru, especially in rural areas. Research is needed to determine the extent to which the onset of puberty affects girls' school completion, to identify which aspects of girls' experiences during puberty serve as deterrents to their continued participation in the education system, and what strategies and policies are needed to overcome these constraints.

To address this need, USAID/Peru requested that the GWE-PRA conduct a study on the effects of menarche and puberty on girls' education in rural areas of Ayacucho.

The objectives of the GWE-PRA Peru are as follows:

- 1. To assess the extent to which the onset of puberty acts as a barrier to girls' primary school attendance and completion patterns in rural Ayacucho; and
- 2. To inform local decision makers and donors and enable them to better design and implement policies and activities to address the constraints on girls' completion of primary education.

1.3.3 The Red Naciónal de Promoción de la Mujer (National Network for the Advancement of Women)

Because of the importance of local involvement in this study, the GWE-PRA Director, in collaboration with the USAID/Peru Mission and the Women in Development office of USAID in Washington, DC, determined that the study should be conducted in conjunction with an experienced local organization. From a number of possible partners, the Red Naciónal de Promoción de la Mujer (RNPM) was chosen to carry out the research fieldwork because of its local, regional, and national membership, as well as its contacts in the Ayacucho region.

The RNPM is a Peru-based NGO, headquartered in Lima. The RNPM has a national council of directors, 5 regional offices, 24 departmental offices, an advisory council (composed of professional consultants affiliated with the RNPM), and a finance committee. The mission of the RNPM is to promote the adoption of public policies that support the execution of the National Program for the Advancement of Women (1990 – 1995, 1996 – 2001) by state and civil society organizations. The 24 departmental organizations coordinate the efforts of 700 members (NGOs, state institutions, men's and women's associations, individual members, etc.) and more than 360 individuals who have volunteered at the national level to support the organization. The RNPM has developed specific strategies in the following areas: family life; agricultural activities; women's health; education and culture; violence against women; political participation; the image of women in the media; and research and information about women.

The RNPM is a member of the Red Naciónal de Educación de la Niña (the National Network for Girls' Education). This network of institutions promotes girls' education primarily in rural areas. It was formed as a means to carry out many of the suggestions from the international conference, *Educating Girls: A Development Imperative*, held in May 1998 in Washington, DC. CARE/Peru coordinates this network, which meets on a regular basis in Lima.

2. WORLDWIDE LITERATURE REVIEW ON PUBERTY, MENARCHE, AND MENSTRUATION

2.1 The Symbolism of Puberty and Menarche in Society

The most evident sign of sexual maturity in girls is menarche, the onset of the first menstrual period. Menarche signifies the beginning of reproductive capabilities and the time when secondary sexual characteristics develop. Menstruation generally begins between the ages of 10 and 16. It is a visible physiological marker of the transition from childhood to adulthood. Its impact depends on the preparation that girls receive in school and at home for the changes that will occur when their first menstrual period arrives, as well as for the lifelong changes that follow.

The way in which menstruation is discussed and the language used to describe it reveal how a society views the event. Across cultures, women frequently talk about the physical and psychological implications of their menstrual cycles. The conversations are often cloaked in metaphor, however, and the language reflects widespread discomfort with menstruating women and a universal reluctance to discuss the process directly.

2.2 Beliefs and Practices About Menstruation

Mirroring the ambivalence that girls experience when they enter puberty, most societies greet the phenomenon of menarche with duality. Many cultures celebrate the onset of a girl's first menstrual period with a positive ritual that is quickly followed by the introduction of negative taboos about menstruation. In some societies, rituals include sending a woman to a menstrual hut, marking her shoulders with sacrificial incisions, or requiring her to fast (Weideger, 1980). In a study conducted in India, 33 percent of the girls in the survey said they were given parties and gifts to celebrate their entry into puberty (Anandalakshmy, 1994).

In other cultures, the ritual associated with puberty is viewed as an opportunity for the society to control the dangerous vapors and powers emanating from the menstruating girl. In earlier times, the indigenous people in South America tried to purify menstruating women by stinging them with ants, beating them, and cutting their skin (Frazer, 1953, as cited by Delaney, Lupton, and Toth, 1988).

Menstrual taboos are purportedly designed to protect women from their own evil powers, as well as to shield the rest of the community from the bad luck associated with interacting with a menstruating female. The Maori in New Zealand believe that contact with menstrual blood leads to death. The Tinne Indians in the Yukon Territory assert that menstrual blood contains femaleness, so boys must be kept away to preserve their manhood. The Eskimos believe that contact with a menstruating woman leads to bad luck in hunting (Delaney, Lupton and Toth, 1988).

The Chichimila people in Mexico believe that newborn babies can die if they are brought into a room with a menstruating woman. In this culture, menstruating women are said to carry an "evil wind," which causes caves to collapse, killing the men who work inside them (Beyene, 1989).

A common belief in many societies is that menstrual blood is dirty. Therefore, women are afraid when their periods are delayed because they do not want to retain what they believe to be dirty blood. To this end, women engage in practices to make the blood thinner. In some countries, women with less education are apt to avoid cold and sour foods, in the belief that these foods create thicker blood that makes menstruation less likely. Women in some societies avoid cooking for fear they will contaminate the food or refrain from touching plants so that they will not cause them to wilt (Snowden and Christian, 1983).

Across cultures, the most common taboos are activity restrictions. In India, whether or not puberty is greeted by ritual, a majority of girls experience sudden restrictions of freedom after menarche. Anandalakshmy (1994) found that after menarche many girls are

immediately prohibited from interacting with males, including family members. In fact, 35 percent of girls said they were more isolated after puberty, 48 percent said they could not play as they used to, and 78 percent reported that they could no longer participate in religious rites.

2.3 Keeping Girls Out of School During Menstruation

In countries across the globe, the onset of puberty marks a significant change in school participation for girls. In more traditional societies, parents take their daughters out of school in an effort to preserve their social reputations until they marry (Herz, 1991; Mehrah, 1995). Parents also remove their daughters from school because they fear that the girls may be sexually harassed, raped, or infected with a sexually transmitted disease by male students, teachers or administrators.

Among the Chichimila people in Mexico, most girls are permanently removed from school at menarche. The few girls who are allowed to remain in school are required to stay home on the days they menstruate (Beyene, 1989). Such restrictions, however, do not prevail in all traditional societies. For example, Anandalakshmy (1994) found that only 3 percent of girls in India were removed from school due to menarche.

In many developing countries, government and school policies contribute to girls' decreased participation by preventing pregnant girls or young mothers from attending school (Herz, 1991). School policies in Botswana, for example, force girls to endure further disruption by refusing to allow young mothers to return to school until their children are a year old. After giving birth, girls can enroll only in different schools from the ones they had previously attended (Ahmed and Meekers, 1996).

2.4 Factors Influencing the Timing of Menarche

The age at which a girl has her first menstrual cycle is determined by a combination of factors, including genetic makeup, SES, general health, nutritional intake, and physical exercise. The age of onset is thought to be an indicator of the general health and well being of a culture or country because of its relationship to health and nutritional status. A decreasing average age of onset usually indicates increasing SES and better nutritional intake among a population. During the 20th century, the average age of menarche has decreased in industrialized countries by 3 to 4 months per decade.

2.5 Adolescents' Knowledge About Their Bodies

Across cultures there is a debate as to whether families or schools should assume the responsibility for teaching young women about reproductive anatomy and physiology. Many traditional societies do not tell girls about menarche until it happens. In India and rural Mexico, for example, studies show that a majority of girls never hear of menstruation until they first experience it (Anandalakshmy, 1994; Weideger, 1980). In a study on the impact of family life education on adolescent pregnancy, Ahmed and Meekers (1996) found that

parents are reluctant to teach their daughters about reproduction because it is traditionally inappropriate and that schools do not teach about sex because they fear reproach from parents.

In a nonrandom sample of 107 women from Chichimila, Mexico, Beyene (1989) reported that cultural norms prohibited women from telling their daughters or other young girls about the menstrual period or about sex before marriage. As a result, 65 percent of the women in the sample said they did not know about menarche until they experienced it, and most considered it a traumatic life event.

Similarly, in a sample of 4,800 Indian girls who had reached menarche, Anandalakshmy (1994) found that only 33 percent of the girls had prior knowledge of menstruation. Of those, only 14 percent were told by their mothers that menarche would occur, revealing a lack of mother/daughter communication on developmental issues. After menarche, however, 71 percent of the girls in the sample said that they were helped by their mothers, thereby implying that mothers interact with their daughters on this issue only to the extent that they must.

Snowden and Christian (1983) conducted a major cross-cultural study for the World Health Organization (WHO) that documented women's patterns of bleeding, and their attitudes toward menstruation. A general survey was completed by 5,322 women of all SES backgrounds in the following 10 countries: Egypt, India, Indonesia, Jamaica, Mexico, Pakistan, Philippines, Republic of Korea, Great Britain, and the former Yugoslavia. The study found that a significant proportion of women did not understand the relationship between the menstrual cycle and pregnancy.

Because of a lack of information about reproductive functions, girls do not understand their changing bodies and shifting emotions. They are at risk not only for increased levels of anxiety but also for pregnancy or HIV/AIDS. In her ethnographic research in New York City public schools, Fine (1988) reported that even when teachers do address sex education, they usually deal only with the most basic biological functions and fail to address the issues that are most troubling to girls. She asserts that by denying adolescents access to critical information about their sexuality, school administrators are increasing their experiences of victimization, pregnancy, and dropout.

2.6 Physical and Emotional Symptoms of Menstruation

The traditions of a particular culture affect women's menstrual experience. Women in different countries and of varied socioeconomic backgrounds do not always experience the physical or psychological symptoms of menstruation the same way. Women's physical activities during the menstrual cycle are linked to the taboos imposed by society. In each of the 10 countries included in the study by Snowden and Christian (1983), the proportion of the women who said that they reduced their work outside the home while they menstruated ranged from 7 to 19 percent. In India, 58 percent of high-caste and 48 percent of low-caste

Hindus said that they reduced outside labor during menstruation owing to fatigue and physical discomfort.

One-third of all women surveyed by Snowden and Christian said that they had taken small rests during their last menstrual cycle. Yet, relative to low-SES women, the sub-sample of high-SES women reported feeling more physical discomfort and were more likely to "act sick" during menstruation. Women interviewed in the Snowden and Christian study were more likely to address the physical discomfort, rather than the emotional changes, that occur as a result of menstruation. Rural, low-SES women were more able to accept the emotional fluctuations that occurred during menstruation because they received more support from their communities than did urban, high-SES women. High-SES women reported more mood fluctuation during menstruation than did low-SES women.

Women also experience frustration because of the discomfort and inconvenience associated with washing rags, keeping themselves clean, and adhering to activity restrictions (Beyene, 1989). In the 1983 Snowden and Christian study, women's behavior did not necessarily correlate with their beliefs about whether menstruation is a sickness. Women in societies with strong menstrual taboos rarely "acted" sick during menstruation, perhaps because they lacked the economic luxury of foregoing their domestic tasks and other labor. Yet women in cultures without such taboos often responded to menstruation as if they were experiencing sickness, perhaps because they could afford to address their physical and emotional needs.

2.7 Concerns About Sexual Abuse

Once girls reach puberty, many parents worldwide worry that their daughters may contract a sexually transmitted disease or become pregnant. Often parents' concerns arise from the possibility of rape by a teacher or peer. These parents may keep their daughters home from school once they reach adolescence (Herz, 1991; Mehrah, 1995). The American Association of University Women reported in "Hostile Hallways" that 70 percent of girls in the United States experience harassment in their schools. A full 50 percent of girls said they were recipients of unwanted touching and 25 percent said that they had been cornered and molested (American Association of University Women as cited by Pipher, 1994).

3. BACKGROUND

3.1 Peru Country Profile

3.1.1 General Description

Peru, with an estimated population of 25 million, is located on the west coast of South America. The western coast of the country is mountainous and arid, the center of the country is high and rugged (the Andes mountains run through this part), and the east consists of semitropical and jungle areas (Hudson 1993).

The Republic of Peru comprises executive, judicial, and legislative branches with an autonomous, single-chamber legislative body. This Congress was established as part of President Alberto Fujimori's transition to a reformed democracy after Fujimori staged an auto coup on April 5, 1992. In the process he closed legislative and judicial branches of the government and suspended the 1979 constitution (Hudson, 1993).

Between 1985 and 1990 most areas of Peru's economy were "marked by expansionary monetary and fiscal policies and high levels of government intervention" (World Bank, 1995a, p. 54). Although these fiscal policies initially resulted in periods of growth, by 1987 the country faced high levels of inflation and deep recession. From 1988 to 1990, real gross domestic product decreased by an average of 8 percent per year, and real wages and consumption declined sharply as inflation reached an annual rate of 7,600 percent (World Bank, 1995a). In the past 10 years, the Fujimori government has managed to reduce and control inflation.

Health indicators in the country are poor. Public expenditure on health was 2.2% of GDP in 1995. The birthrate in 1995 was 25.7 per 1,000 people, the infant mortality rate was 43.0 per 1,000 live births, and the life expectancy was 70.2 years for women and 65.3 years for men (INEI, 1996; United Nations, 1999). Morbidity and mortality from infectious diseases were, and continue to be, high, caused by the lack of potable water and sewage for over 20 percent of urban residences and 75 percent of rural residences (INEI-ENDES, 1996). Malnutrition contributes to childhood illnesses and deaths, and nationally, in 1999, an estimated 29.8 percent of six-year-old children suffered from chronic malnutrition (Ministerio de Educación, 1999). The population living below the poverty line was 50.7 percent and the population living in extreme poverty was 14.7 percent (Instituto Cuánto, 1997).

The country is predominantly Roman Catholic (92.5 percent). Protestant and Mormon religions among the urban poor and indigenous groups have grown although these denominations accounted for the religious affiliation of only 4.5 percent of Peruvians in 1990. Other religions include the Anglican Communion, Methodist Church, and Bahai faith. The official languages of the country are Quechua and Spanish. Unofficial estimates of the proportion of the population in each ethnic group in Peru are Native American (45 percent), mestizo (mixed Native American and European ancestry (37 percent), white (15 percent), and black, Asian, and other (3 percent) (Hudson, 1993).

3.1.2 Education

3.1.2.1 Educational Trends in Latin America

Since the 1960s, education systems in Latin America have undergone tremendous expansion both in number of schools and demand for educational service. From 1960 to 1980 the average annual rates of growth in enrollment were 4.4 percent for primary education, 9.2 percent for secondary education, and 11.4 percent for higher education. Similarly, between 1980 and 1988 enrollments grew at an average annual rate of 1.5 percent, 3.6 percent, and 4.7 percent, respectively, for the three levels of education (King and Hill, 1993).

During the period from 1990 to 1997 primary gross enrollment ratios³ increased from 103 to 113 percent in Latin America and the Caribbean, and primary net enrollment ratios increased from 84 to 94 percent. Secondary gross enrollment increased from 51 percent to 62 percent during that period (UNESCO, 1999; UNESCO 2000).

Both sexes have benefited from these dramatic improvements. However, despite growth in educational opportunities, girls have not benefited as fully as boys. King and Hill (1993) note that across Latin America, for linguistic, cultural, and economic reasons, rural women are at a greater disadvantage educationally than are women living in cities.

3.1.2.2 Education in Peru

Education in Peru comprises a three-level, 11-year system that has been in effect since reforms implemented after 1968. The first level is preprimary for children up to 6 years of age. The second level consists of 6 years of free and compulsory primary education for children between 6 and 12 years of age. The third level consists of 5 years of secondary education beginning when children turn 12. The Ministry of Education is presently experimenting with an optional sixth year of secondary school and a 4-year secondary school certificate.

Like other Latin American countries, the educational status of both sexes has improved substantially in recent years. The gross enrollment ratio for all levels of education (percent of ages 6 to 23) increased from 65 percent in 1980 to 81 percent in 1996. The estimated literacy rate was 83.0 percent for females and 94.5 percent for males in 1995 (United Nations, 1999).

Provision of educational services for boys and girls has increased significantly in Peru in recent years. At the preschool level, no differences exist between girls' and boys' enrollment. However, boys' persistence in school beyond the early grades is greater than that of girls. Furthermore, an examination of primary and secondary enrollment data by geographic area reveals discrepancies between male and female enrollments in certain areas of the country, particularly in rural areas. For example, in areas such as Ayacucho, Apurimac, Huancavelica, Cusco, and Puno, only 50 percent of women are literate (INEI-ENAHO, 1996; INEI, 1993). Girls in rural communities begin school at a later age and are more likely to repeat a grade or drop out before completing primary school. The average number of years of study in rural areas is 3.7, compared with 8.3 in urban areas (INEI-ENAHO, 1996; INEI, 1993). In selected rural areas of the Department of Ayacucho (in the Peruvian Andean region), 60 percent of boys and 49 percent of girls complete primary school (Nuevos Horizontes para la Educación de las Niñas, 1999). The difference between boys' and girls' completion of secondary school in Ayacucho is even more pronounced with

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³UNESCO defines gross enrollment ratio (GER) as "the total enrolment (sic) of pupils in a grade or cycle or level of education regardless of age, expressed as percentage of the corresponding eligible official age-group population in a given year" and net enrollment ratio (NER) as "the number of pupils in the official school-age group expressed as a percentage of the total population in that age group year" (UNESCO, 2000, Annex III, p. 3). GER may be over 100 percent due to repetitions.

approximately 24 percent of males and 16 percent of females (age 6 years or more) completing secondary school (INEI-ENDES, 1996).

3.2 Laws, Policies, and Programs Governing Education in Peru

A number of government policies and laws comprise the basic legal and political framework of education in Peru. The Peruvian Constitution is the foundation for all law in the country and establishes the fundamental rights of its people. The Constitution forbids discrimination due to origin, race, language, sex, religion, or any other condition, and all institutions and citizens are required to abide by it.

In 1999, the Ministry of Education initiated a campaign to prevent pregnancy among adolescents. Additionally, a law was passed allowing pregnant girls to continue their studies without being asked to leave school. However, no specific policies are directed at protecting menstruating girls or accommodating their needs in school.

4. RESEARCH DESIGN

4.1 Research Questions and Hypotheses

The objectives of the GWE-PRA research in Peru are to assess the extent to which the onset of puberty acts as a barrier to girls' primary school attendance and completion patterns in rural Ayacucho, inform local decision makers and donors, and enable them to better design and implement policies and activities to address the constraints on girls' completion of primary education. To achieve these objectives, three basic research questions were considered. Hypotheses were also formulated for some of the questions based on existing knowledge of the problems facing adolescent girls in Ayacucho. These questions and hypotheses follow.

- 1. What role does puberty (and menarche as a visible sign of puberty) play in girls' attendance and retention in school?
 - a) What factors in the family and community affect adolescent girls' attendance and retention in school?
 - b) What aspects of puberty are key to girls' decisions to withdraw from school?
- 2. How can barriers related to puberty best be addressed through policy and program reform and implementation?
- 3. Who are the best people, organizations, or sectors to address these factors?

Hypothesis 1: Menarche changes a girl's self-perception and her relationship to her environment.

Hypothesis 2: Culturally, menarche provokes changes in the way a girl is perceived by those in her environment.

Hypothesis 3: Formal education is not accommodating to menstruating girls.

- (a) Physical discomfort and unpleasant feelings (odor, stained clothing) resulting from menstruation generate school absenteeism and a perception of the need to stay at home.
- (b) Menstruating girls and women are seen as having both special power and at the same time experiencing temporary vulnerability. They require special attention during menstruation.
- (c) Due to beliefs that menstruating females are fertile, girls and women may remain at home to protect themselves from the possibility of becoming pregnant or being sexually abused.
- (d) The school environment does not make it easy for girls to attend school and participate during menstruation because of the lack of facilities, water, and sanitary supplies, and the distance from home to school.
- (e) Attitudes and rules in school (such as obligatory participation in physical education) do not respond to girls' needs.

Hypothesis 4: Menarche signals the time at which girls abandon school.

- (a) Socially, menarche signifies the end of childhood for girls. Their roles as adults are affirmed and they begin to focus more attention on the domestic tasks traditionally assigned to women. The perception that girls don't need to continue their studies is reinforced.
- (b) Because at menarche girls are now suitable for having sexual relationships, they are at risk of sexual abuse and early pregnancy. It is thought that their sexuality should be controlled and protected.
- (c) Socially and sexually, girls feel uncomfortable with their rapid physical development and the emotional changes accompanying puberty.
- (d) Discomfort from menstruation, aggravated by anemia and malnutrition, contributes to poor school performance, absenteeism, and school dropout.

This study uses the following operational definitions of puberty, menarche, and menstruation.

Operational Definitions

- 1. **Puberty:** The period or age of sexual maturation and the development of secondary sex characteristics
- 2. **Menarche:** First menstrual period or onset of menstruation
- 3. **Menstruation:** Monthly bleeding at the beginning of each menstrual cycle
- 4. Girls' education issues include
 - (a) Enrollment
 - (b) Attendance
 - (c) Retention (years of study)
 - (d) Completion of primary education (6th grade)

4.2 Research Site

4.2.1 Site Selection

The study was carried out in eight rural communities in the department of Ayacucho. The GWE-PRA research team, in collaboration with the USAID mission in Peru, selected this site for two

reasons. First, Ayacucho is one of the poorest areas in Peru and has one of the lowest rates of girls' participation in education in the country. The national illiteracy rate in Peru is 18 percent, but in areas of Ayacucho it is as high as 50 percent (INEI-ENAHO, 1996; INEI, 1993). Second, the USAID/Peru GWE activity (administered by CARE) selected Ayacucho as the area in which to concentrate its interventions.⁴ At the start of this activity, an assessment of general constraints on girls' education was conducted (Guerrero, et al, 1999). However, specific information on the effects of menarche was not a major component of the analysis. Hence, this study complements other research carried out in the area.

The eight communities where the studies were carried out are located in five districts of three provinces in Ayacucho, as shown in Table 1.

Table 1: Research Sites

Province	District	Rural Community
Cangallo	Pampacangallo	Tucsen
		San Cristóbal de Putica
Vilcashuaman	Vischongo	Pomacocha
		Ñuñuhuayco
		Patahuasi
Huamanga	Santiago de Piccha	Qayarpachi
	Acos Vinchos	Santa Rosa de Cochabamba
	Soccos	Luyanta

In selecting the communities to be included, the GWE-PRA used the same criteria employed in identifying the areas on which to focus the CARE GWE activity. Four factors were considered:

- 1. Economic conditions. The sample was selected from among rural communities suffering from conditions of extreme poverty.
- 2. Altitude. In Peru, certain norms and traditions are associated with the topography of the land. Out of necessity, those living in mountainous areas have adopted different social and cultural patterns than those living in the lowlands. Additionally, health issues may be related to altitude. For example, girls at extremely high altitudes typically begin menstruation at an older age than those at lower altitudes. Consequently, to avoid variation in responses resulting from these differences, the

SAID/Peru is working with CARE under contract with the American Institute for R

⁴ USAID/Peru is working with CARE under contract with the American Institute for Research, on another component of the GWE activity that focuses on girls' education issues nationally and in the Ayacucho area.

sample was selected from areas at similar altitudes. This study is limited to communities located 2,600 to 3,600 meters above sea level (m.a.s.l).⁵

- 3. Population size. The majority of communities have a population of 100 families or less.
- 4. Existence of public and private institutions. Public and private social service organizations are already operating in each of the communities included in the study. These communities were selected because existing linkages between Red Naciónal and organizations in the communities made it possible to select researchers from among women (such as health care workers) who had already established relationships with members of the community and were trusted by community leaders and residents.

4.2.2 Characteristics of the Communities of Ayacucho

All communities in which the research was conducted are located in areas with extreme poverty levels that have an agrarian pastoral economy. Much of the population was forced to migrate to Lima or the city of Huamanga (capital of the department of Ayacucho) during the last decade because of political violence in the region. However, many of the inhabitants who left during this period have now returned. Also, due to the demands of work and school, constant movement occurs among family members between the communities and urban centers.

Although primary schools exist in all of the communities, not all areas have access to secondary school. In five of the communities, parents must send their children to secondary schools located in the district capital or in Huamanga, thus increasing their school-related expenses and incurring additional risks, especially for girls. Similarly, not all communities have access to health services. Health services can be found in Patahuasi, Pomacocha, Santa Rosa de Cochabamba, and San Cristóbal de Putica but not in Tucsen, Ñuñuhuayco, Luyanta, and Qayarpachi.

Private institutions are carrying out development initiatives in seven of the eight communities in the study. To provide a basis for comparison, a community where no private institutions are working (Qayarpachi) was also selected. No other major differences exist between Qayarpachi and the other communities. In the sections that follow, additional information is provided for each community in the study.

4.2.2.1 Vilcashuaman Province: Ñuñuhuayco, Patahuasi, and Pomacocha Communities

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⁵ One community (Luyanta in the Huamanga Providence) located at 4,100 m.a.s.l was included because it was part of the cluster of communities where the GWE-PRA survey was being conducted

The Nuñuhuayco and Patahuasi communities are located in the district of Vischongo, 3,320 m.a.s.l. An average of 50 permanent families and 25 itinerant families reside in each community. This area was hard-hit during the period of political violence, especially between the years from 1991 to 1993, which forced many residents to move. Community residents now move between the capital city of Ayacucho and their homes. Older children attend school in Ayacucho, and the younger ones go to school in the community. Parents frequently travel between the community and Ayacucho where their older children are attending school away from home. During the initial stages after the political violence, the only existing community organizations were the mothers' association and a self-defense committee. Recently, traditional organizations, sport clubs and community action groups have been reactivated. These organizations currently receive support from public institutions such as Programa de Repoblamiento (PAR) and nongovernmental organizations (NGOs).

The Pomacocha community is also part of the Vischongo district. Located at 3,150 m.a.s.l., it is a large community, consisting of 480 families. Its main economic activity is agriculture.

4.2.2.2 Cangallo Province: San Cristóbal de Putica and Tucsen Communities

The San Cristóbal de Putica and Tucsen communities are located in the Cangallo Province, at 2,950 m.a.s.l. and 2,600 m.a.s.l. respectively. The populations of these two communities range from 60 to 90 families. The main economic activities are agriculture and cattle raising. The San Cristóbal de Putica community also experienced extreme political violence, and its population was forced to move temporarily. These communities receive support from both public and private sectors.

4.2.2.3 Huamanga Province: Santa Rosa de Cochabamba and Luyanta Communities

Santa Rosa de Cochabamba is located in the district of Acos Vinchos and Luyanta in the district of Soccos. The majority of the communities in the area originated from former haciendas in the area. Located between 2,900 and 3,075 m.a.s.l. and between 3,100 and 4,250 m.a.s.l., the population of each community is composed of an average of 60 families. Both state institutions and NGOs are involved in these communities.

4.2.2.4 Huamanga Province: Qayarpachi Community

As indicated previously, the Qayarpachi community, located at 2,600 m.a.s.l. in the Santiago de Piccha district, was included in this study for comparison purposes. No private institutions work in Qayarpachi. This community of 160 families has been severely affected by violence. Most of its population consists of former inhabitants who have returned to the community. Agriculture is the main economic activity.

4.3 Methodology

The study employed both qualitative and quantitative methods of data collection. However, the data are largely qualitative and result from using ethnographic research techniques. Qualitative instruments were used to conduct focus group discussions and in-depth interviews with boys, girls, and community leaders. Quantitative information was collected using survey instruments.

The research team consisted of eight members: four field technicians (Maura Quispe, Ada Luz Rojas, Ana Santivanez, and Rosa Elena Quispe) and four core researchers (Gumercinda Reynaga, Maricela Quispe Córdova, Rosa Dierna Straatman, and Carmela Chung). The core researchers are affiliated with the RNPM at the national and local levels. The RNPM works locally and with municipal governments, Ministry of Health, Ministry of Education, Ministry of Justice, Ministry for the Advancement of Women and Human Development, and the Federación de Clubes de Madres de Ayacucho (Federation of Mothers' Clubs of Ayacucho), which is the largest organization of women in Ayacucho. This organization was formed after a period of acute terrorism in the region during the 1980s. In addition, the RNPM/Ayacucho is a founding member of a local network for the education of rural girls in the Ayacucho region.

The bulk of the research was conducted in education centers, as well as in communal areas in each of the communities. A total of 28 focus group discussions were carried out with separate groups of boys, girls, fathers, and mothers. Additionally, 122 surveys were administered to 51 boys and 57 girls in the sixth grade and 21 primary school teachers (8 men and 13 women). Individual interviews were conducted with 14 community leaders (7 male and 7 female); 7 girls (ages 12 to 16) who never entered school; 7 girls (ages 12 to 16) who completed primary or secondary school; 7 primary school teachers (6 men and 1 woman) in the capitals of districts where the selected rural communities are located; 7 female community leaders with teenage daughters; and 7 male community leaders with teenage daughters. Finally, observations were carried out in seven schools (in the classrooms and on school breaks) using detailed observation guides. Focus group guidelines, interview instruments, and observation guides are in a separate document and are available on request.

4.4 Limitations

The sample was purposively selected on the basis of the criteria noted earlier. Therefore, it was not appropriate to carry out statistical tests requiring the assumption of random selection nor could generalizations be made to the larger population outside the realm of identified criteria. It is unknown, for example, whether similar responses would be obtained in large urban areas of Peru, where girls have much greater access to information, facilities and sanitary products.

Because the primary focus of this study was on the effects of menarche and puberty on girls' education and girls in school, only a few girls were interviewed who did not attend school (7 girls ages 12 to 16). To get a more comprehensive picture of the impact of menarche and puberty on adolescent girls in the community, it is suggested that a more in-depth study be carried out.

The questions asked of respondents dealt with highly personal and often embarrassing subject matter. The extent to which respondents answered the questions candidly is unknown. In Andean communities, few people talk about menstruation (the majority of the girls do not talk about this subject with their parents or their teachers). Nevertheless, the researchers were experienced interviewers and were familiar with the areas in which they were working. Some had previously worked with ReproSalud (a local health-related project) and the RNPM in the area, and the trust and rapport necessary for honest discussions were already established. Hence, it is reasonable to assume that the respondents provided accurate information and expressed genuine opinions.

Although this qualitative approach does not provide the basis for conducting statistical analyses, it contains rich explanatory data that provide valuable insight about the issues surrounding girls' menstruation, girls' experience of menstruation, and the effect of these factors on their school attendance and performance.

5. FINDINGS OF THE GIRLS' AND WOMEN'S EDUCATION POLICY RESEARCH ACTIVITY IN PERU

5.1 What Factors in the Family and Community Affect Girls' School Attendance and Retention?

Several factors affect girls' attendance and retention in school. In Ayacucho, many of the impediments to girls' education are similar to those in other parts of the world. Interviews and focus group discussions with survey respondents revealed both supply- and demandrelated barriers to girls' education. This study focuses on factors that are directly linked to puberty, menarche, and menstruation as they relate to schooling. Table 2 summarizes the barriers associated with these puberty- and menarche-related factors that were cited by parents during interviews.

Table 2: Summary of Puberty- and Menarche-Related Factors Identified by Parents as Contributing to Girls' Attendance and Retention in Ayacucho

Supply Factors	GWE-PRA Research Results
Accessibility	 Lack of sanitary facilities/sanitary products in schools
Quality of schools	■ Insufficient number of trained, high-quality teachers, especially women, who understand and are sensitive to puberty-related issues
	■ Lack of concern among teachers about puberty-related

	 issues Incompatibility of daily school schedule with needs of menstruating girls
Demand Factors	GWE-PRA Research Results
Cultural and social traditions and biases	 Repetition of lower grades by pubescent girls; shame resulting from being over age Early sexual relations Early marriage Adolescent pregnancy Burden of child-rearing Increase in domestic and productive responsibilities for girls at puberty Shame, fears, discomfort, exacerbated by teasing from classmates

Supply-side factors (mentioned by respondents) that fall outside the realm of this study include availability of schools, insufficient number of trained teachers, teacher absenteeism, and an inadequate supply of textbooks. A number of informants described economic barriers to both girls' and boys' education that affect their demand for education. Specifically, demand factors (unrelated to menarche issues) cited by respondents included perceptions of opportunity costs associated with educating girls, poor health conditions, and the inability to pay school or housing fees. Problems that adolescents in the GWE-PRA study identified as affecting their lives are described in Appendix 2.

5.1.1 The Symbolism of Menarche in Andean Society

As in many other societies, menarche in Andean culture marks the transition from childhood to adulthood. The language used to describe menstruation reveals much about how it is regarded by Andean society. The notion that spoiled blood, bad humors, and disease accumulate in the body is very strong; for a woman to remain healthy, she must expel the blood periodically, cleansing herself through menstruation.

Respondents' descriptions of menstruation in the GWE-PRA study in Ayacucho included these:

- "It is blood or bleeding that comes each month."
- "It is a custom or law for women."
- "It is something natural that happens to each person at a certain age."
- "It is a limitation but not a problem."
- "It is something that bursts in my insides."
- "It is bad blood that is released; it cleanses the body."

- "It is a cycle in which the ovum explodes when it matures and the blood that is unnecessary is released."
- "It is getting sick each month."

5.1.2 Age of Menarche in Peru

In 1996, Gonzales and others conducted a study on the influence of ethnic background and SES on the age of menarche in Peruvian girls. The sample included 503 girls from Lima and 625 girls from the city of Cerro de Pasco, which is 4,340 m.a.s.l. The girls, who ranged in age from 10 to 18, were divided according to origin (Quechua and Spanish) and level of SES. Researchers used the "life-table method" to determine the age of onset of the menstrual period and then performed a logistical regression analysis. The study revealed that girls living at the highest altitudes had a later age of onset that was not due to differences in SES or ethnic background. The study found that the median age of onset was increasing in Peru, suggesting that quality of life is decreasing. Researchers have noted similar results in Poland, where age of menarche increased in response to social and economic crisis.

Other research has focused on environmental and nutritional factors related to menarche, such as weight at menarche. A study was carried out in three cities in Peru: Huamanga (department of Ayacucho), Sullana (department of Piura) on the northern coast, and Iquitos (department of Loreto) in the southern rainforest of the Amazon region (López, 1985). López suggested that differences found across areas between groups of girls attending public school and those attending private school, where those in private school weighed more and were more likely to have earlier onset of menstruation, may be due to nutritional deficiency. According to INEI-ENDES information, in 1996, 40.4 percent of the children (less than 5 years old) in rural areas suffered from chronic malnutrition.

All but one of the 57 girls interviewed in the Ayacucho region during the GWE-PRA study were willing to provide information about the age at which they began menstruating. Of those reporting, 33 girls (59 percent) had begun menstruating. The most frequently occurring age of menarche was 13, with 39 percent of the menstruating girls indicating that they had begun their periods at that age. The mean age of menarche was 13.59. Of the 23 girls who had not yet begun to menstruate, one girl was 11 years of age, 10 girls were 12, 10 girls were 13, one was 14, and one was 15 (see Tables A 3.1 and A 3.2 in Appendix 3). The average age of menarche for the girls in the GWE-PRA study was slightly younger than reported in previous studies of women residing at similar altitudes. However, the findings cannot be compared since not all of the girls in the GWE-PRA study had begun menstruation, the sample was not large enough to make statistical inferences, and the sample was not randomly selected.

5.1.3 Knowledge and Perceptions of Menstruation

During the transition to adolescence, young people need information about issues concerning physical and psychological changes of puberty, dealing with relationships (falling in love and

finding a mate), as well as about sexual activity (e.g., pregnancy, family planning, sexually transmitted diseases). When asked to describe sexual changes that take place during maturation, all informants (parents, teachers, and adolescents) in the GWE-PRA study had something to say about the subject. The adolescents in the study were the most talkative about this topic. Both boys and girls were able to describe physical changes in the body that take place during puberty (e.g., girls breasts develop, boys' voices get deeper). Table A4.1 in Appendix 4 summarizes respondents' descriptions of the physical changes associated with puberty.

Parents of adolescent girls and the girls themselves also recognized certain emotional changes that influenced behavior. For example, parents talked about girls' increased interest in their personal appearance. Women in a focus group in Pomacocha commented on the changes the young girls undergo when they reach menarche: "They change their clothes; they fix themselves up; they dress up" and "They want a man; they crave a man." Table A4.2 reflects perceptions of the women about these psychosocial changes.

Women in the Andean community are very attentive when they find out that someone has experienced menarche. Because of the lack of appropriate sanitary supplies the entire community quickly becomes aware of a girl's first and subsequent menstrual periods. Although such matters are not openly discussed, women talk, comment, and criticize among themselves. For the most part, children and adults in the GWE-PRA study were embarrassed to talk about menarche. They spoke in hushed voices and they bowed their heads when asked to talk about the subject. Both women and girls laughed a great deal, and adult men became serious and uncomfortable, either because of the topic or their lack of knowledge about it.

Many of the women were ashamed of their lack of knowledge, using expressions such as "I forgot" and "I still haven't been taught that" (mothers' focus group, Tucsen). Many of the women informants were illiterate or had not finished primary school. Girls who abandoned school could not answer questions about the body or about menarche, but the girls who had gone to school could at least name female body parts.

In general, women and girls agreed that they did not know they would be experiencing menarche and that the onset of menstruation took them by surprise. Despite the fact that more than half of the 57 girls surveyed said they knew about their sexual organs, about the same number of girls said menarche was a surprise, since they were not aware of the changes taking place.

Informants' understanding of anatomical and physiological terms and concepts was most likely due to the influence of an agency outside the community, through activities such as school health classes, membership in a parents' organizations, or participation in a lecture given by a health center or NGO.

Boys in the study observed that once girls undergo menarche, "They get pregnant; they do poorly in school; they get married when they are very young; and they drink at parties every night." In general, boys held more negative than positive connotations of girls who had experienced menarche.

According to one mother, "they [boys] embarrass them, [when they know] that the girl is menstruating already." Another mother in a focus group in Putica said, "The boys begin to bother them." A community leader in Pomacocha commented that the girls are in danger when they are around men.

Parents perceive the changes in their daughters, and these changes, in a certain sense, produce respect, consideration, and pride. The fathers interviewed in focus groups described girls who have reached menarche as "calm and serene" and "smiling and happy." In addition, the men thought that the young girls were more independent and more inclined to make their own decisions. As one father said, "They think about their own lives, their food, their house, their mother and father."

The men were also concerned that the young girls would initiate a sexual relationship once they had experienced menarche. According to one father in a focus group in San Cristóbal de Putica, the female body "relieves itself." In addition, this same group of fathers stated that the young girls feel "agile," "flexible," and "brave." A father in a focus group in Pomacocha stated that menarche is useful "to feel well sexually." Another father from this group stated that the woman could have "more blood" than necessary. This same group of fathers, asserted that "the blood would then coagulate inside or a tumor would form." According to one of the fathers, "She may even go insane." A girl in this same community commented that she could even die as a result of menstruation.

5.1.4 Beliefs and Practices About Menstruation in Peru

In rural Peru, a female who has begun to menstruate is perceived to be different by the community. Not only is she now considered a woman, she is also believed to have acquired special powers that enable her to attract a man sexually. Menstruation also holds many negative connotations. During her menstrual period, a young girl is believed to have become polluting, harmful and even lethal for babies and other living things.

5.1.4.1 Taboos and Prohibitions

Beliefs about menstruation have given rise to a series of taboos that are part of the norms that regulate life in the community. For example, in Andean culture, women who are menstruating may be prohibited from participating in a range of activities related to handling farm products, crops, plants, and flowers. Informants stated that the women could not touch plants and cereals because the menstrual cycle destroys life. Holding small children may also be forbidden because, according to a focus group with girls in Santa Rosa de Cochabamba, "they turn purple." Girls from Luyanta were quoted as saying, "If the baby is white he could turn black," "His blood gets stained," and "We could give him the evil eye" (mothers focus group, Luyanta).

The inhabitants of Tucsen, who belong to Israelite and Adventist religious sects, believe that a menstruating woman should not be part of religious services because she would contaminate the sacred space since she "is dirty with blood." A community leader in

Pomacocha commented, "She also cannot have intercourse with her husband, since any disease could result, because it is bad blood."

Many traditional Andean beliefs deal with how a menstruating woman of any age should behave and what precautions she should take to ensure her health. These precautions are related to hygiene (use of water, products to absorb menstrual blood), nutrition, and carrying out daily activities. For example, some community members interviewed in the GWE-PRA study felt that using warm or hot water was better than cold water during menstruation because cold water could freeze the menstrual blood or cause stomach pain. However, others believed that cold water was better. Some people recommended that bathing be done in the river. In the community of Putica, one of the fathers stated that is important to bathe to prevent uterine cancer. He noted that there were several cases in his community, adding, "There are some mothers who are suffering and just awaiting their deaths" (fathers focus group, San Cristóbal de Putica).

Women in the study cited the following activities as things that menstruating women should not do:

- participate in gym class
- carry loads because it could cause a hemorrhage
- work on the farm
- go out or travel (they should stay at home and rest)
- ride horses

These precautions are meant to protect menstruating girls and women from the cold and from physical exertion, and interestingly, the same restrictions are also recommended for pregnant women.

It was evident from these interviews that, although these taboos exist in all the communities, many people do not believe them. One woman in a focus group of mothers in Pomacocha commented, "I always pick vegetables. I touch my plants, and nothing has ever happened. That's a lie. It's all talk."

Another woman from Nununuayco said, "That's foolishness. I have a normal orchard at home, even if she [a menstruating woman] touched it.... That custom is still around, but the truth is, we haven't proved it; no we haven't."

5.1.4.2 Protection and Sanitary Measures During Menstruation

During interviews and focus group discussions, some mothers said that in the past women did not wear underwear. According to participants in a focus group with parents in Luyanta, some women still "can't get used to it; they don't want to wear anything." Several items are currently used for protection during menstruation. The most accessible options in their precarious economy are old clothes, such as black or maroon skirts with or without a slip, pants, panties or briefs

made of knit yarn, and small rags that are cut up and placed in underwear. These items all need to be changed and washed at home or in school.

Although a few women and occasionally girls in these communities use sanitary pads, no one in this study reported that they used them. One mother stated, "There's nothing, no pads, just panties. What else can I give? What pads could I buy? There is no money" (mothers focus group, Tucsen). Nurses in the community reported that the girls use small rags to save money. One teacher stated that the government would have to distribute feminine products in the schools in order for "the girls to be able to act more normally."

5.1.5 Treatment of Physical and Emotional Aspects of Menstruation

Adults and children of both sexes stated that during the menstrual period, a woman undergoes physical and emotional discomfort of varying intensity that alters her normal life course. Girls in the GWE-PRA study reported that the clearest indication of menstruation is "pain in the waist and stomachaches" that are sometimes "like going into labor." They often described their experience with menstruation in terms of physical discomfort (headache, stomachache, backache, and loss of energy) and emotional distress (sadness, boredom, sleepiness, crankiness, and nervousness). Appendix 5 reflects how the girls interviewed described their experience of menstruation. According to some of the teachers interviewed, certain girls "are strong and don't pay attention to menstruation; it is as if nothing is going on. They take gym class, they jump, run" (teacher, EAP⁶, Pomacocha). Nevertheless, 60 percent of the girls interviewed complained of severe pain during menstruation, "which resulted in frequent absence from school.

5.1.5.1 Menstruation, Sexuality, and Pregnancy

Most women and men in the Ayacucho area understand that if there is menstruation, there is no pregnancy, and if the woman is pregnant, there is no menstruation. Nevertheless, there were different opinions in these communities about whether or not a woman is fertile during menstruation. The idea that a woman usually cannot become pregnant while menstruating is primarily due to the information disseminated in schools and public health services in Ayacucho. However, according to traditional Andean belief, a woman's fertile period is during menstruation. Menstruation is considered a sign of danger for women because of the possibility of pregnancy. It was also well known by both males and females and by informants of all ages that "union" (sexual intercourse) may produce "fertilization."

All the adults who were interviewed expressed concern that both boys and girls initiate their sexual experiences too early (at 12 or 13 years of age). However, the adolescents in the study reported initiating sexual activity at an older age (between 15 and 20 years of age). The most frequently cited age by adolescents for beginning sexual activity for girls was 20 (45 percent) and for boys was 18 (38 percent).

⁶ Throughout the remainder of this report, entrevista a profundidad (in-depth interview) will be referred to as EAP.

⁷ Health care providers reported that menstrual pain and irregularities are fairly common in young girls and are not necessarily indicative of disease.

The community reflects ambivalence toward early sexual activity. On one hand, premarital activities are ostensibly condemned and young people are forbidden to talk openly about sexual issues. On the other hand, an underlying acceptance of pre-marital sexual freedom exists in the community. Recently, however, because of the strong influence of education and health organizations in the community, more adults have begun to recognize the consequences of early sexual activity. Some of the fathers interviewed made statements such as, "In this community, there are plenty of single mothers" and "It would be better to be of a mature age before looking for a mate, and marriage should last until death" (fathers focus group, Santa Rosa de Cochabamba).

According to teachers and nurses in the community, courtship among young people includes a substantial degree of aggressiveness and violence that is accepted as normal. This aggressiveness and violence has been described as "reciprocal – as this is their way of relating." One teacher in Cochabamba stated, "The girls themselves tend to annoy the boys, brutally. Falling in love is harsh, rough; they insult each other. The girl will even grab a stone to throw it at the boy she likes. She is not afraid to throw it at his head" (teacher interview, Santa Rosa de Cochabamba).

Boys in a focus group in Luyanta commented that sometimes, for instance, a young bus driver might throw small pebbles at a girl, and if she throws them back it means she wants to be with him. The boy interprets this as, "She loves me." Then the boy gives her flowers, and they fall in love. Fathers in this community said that girls often go to the quiet areas where mudslides have occurred. Their schoolmates wait for them and tease them; they "make them play, and that's how they lose their morals" (fathers focus group, Luyanta).

In addition, boys fight over girls in school: "You are taking my woman away from me.' One day they hit each other over a girl" (teacher, Santa Rosa de Cochabamba). This also seems to be traditional. Once young adolescents fall in love, the norm is to have intercourse immediately, always out of the adults' sight, on the farms, in the mountains, in the mudslide areas, or in any out of the way place. The "first time" is usually at a party, either a birthday party or a party at school (mothers focus group, Putica).

One nurse from Pomacocha stated, "On August 20, [a local fiesta] 10- and 11-year-olds are getting drunk, being intimate." Parents at Santa Rosa de Cochabamba said that when there are parties, the mother and father go drink and leave the children alone. "They take advantage of this, they have fun at night, and that's how pregnancies occur. Boys don't want to be responsible; they deny that it's their child."

Many boys view girls who have reached menarche as sexual objects. Boys have heard from their mothers and grandmothers that when a girl bleeds, she "is ready to look for a man and be with him." A teacher in Luyanta commented about girls' experience of sexual intercourse, stating "Young men go looking for girls at the pasture, and when the girls are not paying attention, they go and rape them." The girls become pregnant, and their barely begun adolescence comes to an end. As many of the boys deny paternity, they are able to continue to enjoy their adolescence.

The girls, on the other hand, abruptly become single mothers, cutting short any expectations for formal education or self development, and exacerbating existing poverty.

When asked about the use of birth control in the community, a female leader in Qayarpachi commented, "Before, there was no birth control, we were living like little animals, you see. Women had many children and do not seem to have used birth control methods." Children came and were welcomed because they were needed for work in the field. However, they were also perceived as a heavy load for women. The generation of young women who completed primary and high school, as well as the older sons and daughters of the interviewed parents, probably started using contraceptive methods (rhythm, the pill, injections, condoms, and intrauterine devices) after their first child.

Boys and girls asserted that they had learned about these birth control methods in school from teachers or from nurses at the health centers. When asked whether adolescents use contraception, they replied that they did not know or said that "some are careful, and others are not."

In almost all the communities, pregnant girls between 13 and 16 years of age who were interviewed said that once they became pregnant, they stopped studying. Fathers and mothers indicated that they are beginning to see contraception as a means for their daughters to postpone pregnancy, and in this way, to steer the course of their lives towards other goals, such as completing school and having a career. This path is viewed as a way of escaping poverty.

5.1.5.2 Gender Violence: Sexual Abuse and Rape

Ayacucho is recovering from an era of extreme political violence and subsequent disruption of the social fabric. Many of the communities in this study were affected by repeated incidences of violence, including alleged sexual abuse of girls, in some cases by members of the military as related in an interview of an adolescent girl, "The soldiers would come night and day. They would take the girl, rape her; that's how they ruined many girls, and some even got pregnant, and it happened in a group. Not even the girl herself knows whose child it is. That has happened many times."

In addition to communities' past experience of violence, the growing influence of modern, urban culture and widespread internal migration have resulted in irreversible changes (both positive and negative) in Andean lifestyles. A noted increase in gender-related violence may be related to such changing social structures, long-term exposure to violence and the harsh reality of rural poverty. The consequences of such violence were and continue to be keenly felt among adolescent girls, who are often the most vulnerable to sexual abuse and rape.

Interviews with respondents in the GWE-PRA study corroborate earlier studies that found that sexual relations among young people in Andean culture have the following characteristics.

• Although sexual relations among adolescents are usually consensual, they are often somewhat violent. If the male is older, sexual encounters are usually forced.

- Adolescence is not a period of growth and development, nor of experimentation and learning about sexuality, but rather a time of forced taking on of adult roles.
- Early unions and pregnancy often characterize a girl's passage from childhood to adulthood. A large majority of teenage mothers are abandoned by the baby's father and become single mothers. In most cases, these males do not take responsibility for the children they father, but instead wait to find mates and form their own families at a later age.

No references were made to sexual attacks on girls while they walk to school in Tucsen, Putica, and Ñuñuhuayco/Patahuasi. Even though houses are far apart and girls come home by themselves and walk through unpopulated areas, parents and teachers said that it is a quiet area and attacks do not occur, but they still felt that girls face danger walking to and from school.

Violent incidents have occurred in other communities. The problem is most serious for students who live far away and must walk long distances to school. Any open space becomes dangerous for girls, especially once she begins to menstruate. There are instances in which girls are attacked, either by intoxicated local men or strangers – young men who have returned from the city and have "other customs." According to some of the informants interviewed, men wait by the road to flirt with young girls and that is where "things happen." These incidents are also described as "the *pishtaco* [legendary malevolent Andean character] kidnaps women on the mountainous roads."

Several girls were reportedly raped by their stepfathers in one of the communities in the study. However, only one actual case was cited by respondents. According to one female teacher, when the teacher would lecture on sex, the girl would cover her face and cry. "She was afraid of the male teachers, and when I would call her she would run away." She finally told her teacher that when her mother would go to the farm, her stepfather would take advantage of her. Unfortunately, according to the teacher interviewed, the school did not intervene. The student completed the remainder of the year but did not return the following year.

Interviewees made two direct references to students being sexually abused by a teacher in two of the communities studied. In the community of Pomacocha, several people stated that a teacher fell in love with his student, and they ran away. After some time the girl returned, and she was pregnant. The incident was covered by the newspapers. Respondents also mentioned similar situations in other communities and in the city of Ayacucho. One teacher commented that the interrupted school schedule (when there is a school break during the day, thus causing classes to end later) encourages such incidences because, "It gets dark during the rainy season, they play and get out at five, six, or seven at night." Also, at religious or school celebrations, girls start drinking at a very young age. According to one father, "Teachers aren't firm like they used to be. They drink and go to the party." Parents mentioned that classes cease two days before the parties, and male and female students as well as teachers begin to drink. Some said that the teachers take this opportunity to "negotiate" grades with the girls.

In a 1997 scandal in Qayarpachi, the school principal was removed for sexually abusing a student. The girl was a 15-year-old sixth grader, and the man was between 40 and 45 years old.

According to the parents, the teacher had not raped her forcefully but had seduced her. Finally, the girl's family took her to Lima.

Recurring accounts of sexual abuse in the community are cause for concern. Even if the incidence of *actual* sexual abuse is low, the fear that it *might* happen can significantly affect girls' school attendance and completion.

5.1.5.3 Nutrition During Menstruation

Both male and female informants reported that during menstruation women eat the same foods that they eat every day. However, several respondents indicated that if they had more nutritious food available (meat, chicken, or milk) they would give it to menstruating girls. They were unable to do so because they could not afford such products.

In some families, local customs discourage the consumption of several foods and drinks during menstruation, including the following:

- milk, because it is believed to cause stomachaches or transform blood into white discharge
- candy
- acidic fruits such as lemons or oranges, because they are thought to spoil the blood and turn it white
- alcohol
- hot peppers
- water, because it is believed it could make blood transparent
- heavy foods, like tuna fish, because it is thought that such foods can cause infection (only light foods such as broth and pudding are considered acceptable)

5.1.6 Nutrition, Menarche, and Student Performance

Many children in Ayacucho suffer from poor nutrition, which is thought to result in poor academic performance in school. In addition to nutritional deficiencies, an adolescent girl also faces the risks associated with blood loss from menstruation. It is probable that a large proportion of these girls have chronic anemia due to poor nutrition and menstrual blood loss. Several of the signs of discomfort noted in Appendix 5 may also be associated with anemia: paleness, weakness, and fatigue, as well as difficulty with physical exercise.

Nutrition in all the communities in Ayacucho is very poor. The fields produce very little and since there is no credit for farming in the area, it is difficult to introduce new crops or farming methods. Students do not always eat before going to class, and if they do have food at home, it usually consists of something light like soup or mote (a variety of Andean corn). Most children are provided with a breakfast at school by the Programa Naciónal de

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⁸ There is a strong correlation between the nutritional status of children and their attendance and performance in school (Levinger, 1989). According to Pollitt (1990), nutritional deficiencies reduce student performance and contribute to high rates of absenteeism and dropout.

Asistencia Alimentaria (PRONAA), which consists of milk, cereal, and fortified cookies. Sometimes "it is too sweet and bores them," and on other occasions "it is spoiled, and they get sick." After consuming the school breakfast, the children continue their schoolwork without a break until 3 o'clock in the afternoon. Once they get home, they eat the same thing that they had in the morning. In some cases, there is nothing to eat because the families either cannot afford it or because the parents have gone to work on distant farms and do not come home every day to prepare or supervise meals.

For these and other reasons, academic achievement is very low. Children tire quickly, fall asleep, or become bored. Teachers can only hold class in the morning. After midday, no one is in any condition to listen to teachers' explanations. Sometimes students even escape from the classroom. Although the difficulties caused by nutritional deficiencies are serious by themselves, with the added problem of anemia associated with blood loss during menstruation, the impact on girls' health and school performance is considerable.

5.1.7 Perceptions of Male and Female Roles

To better understand the factors that prevent girls from continuing their education after reaching puberty, it is important to know how the family and community define gender roles. According to Anderson (1994), the concept of identity is a changing and situational attribute determined by the opposing relationships that occur in social reality. In traditional Andean culture, men and women move in different and opposite worlds. Male and female paths generally travel in parallel lines in clearly defined spaces (e.g., in the house, on the farm), although the culture has established moments and places in which men and women may potentially unite and complement one another.

How girls see themselves and their role in society strongly influences their motivation to attend school and their confidence to stay in school. Girls and women interviewed in the GWE-PRA study expressed considerable dissatisfaction with the traditional roles they are expected to play in the family and community. There was an acute awareness among those interviewed that being male held tremendous benefits that were not afforded to females. Appendix 6 contains detailed responses of male and female respondents to questions about gender roles.

5.1.8 Increased Responsibilities for Girls After Menarche

A significant event in the socialization of boys and girls is assumption of work responsibilities. In the Andean culture, a strong emphasis is placed on helping the mother and father. When children grow up, helping their family and community becomes increasingly important. A woman who helps her family and her neighbors in the community is considered a role model and held in high regard. In addition, sons and daughters are expected to obediently take on all of the tasks their parents assign them. To ensure compliance, adults sometimes resort to physical punishment. When asked whether or not they used force with their children, one mother answered, "whether male or female but only during planting time and by force even if they don't want to, we can herd them with a whip" (mothers focus group, Santa Rosa de Cochabamba). Some parents reported that in order to make children work "sometimes we force them through

physical punishment." Some of the fathers in a focus group discussion in Santa Rosa de Cochabamba asserted that young people from the country are "hardworking" and those from the city are "lazy."

As children grow older, their tasks become more complex, with different responsibilities assigned to girls and boys. From an early age, children are taught the importance of hard work, and a higher priority is often placed on girls' domestic chores than on their academic activities (Anderson, 1994). Without doubt, life is hard, and many demands are placed on rural boys and girls; however, the load is greater for girls. Although some boys do a small amount of domestic work, for the most part domestic tasks are the responsibility of girls, while boys are primarily responsible for farm tasks. For girls, menarche signals that, like their mothers, they must assume greater responsibility for taking care of their younger siblings and their parents, as well as for doing household and farm chores. Appendix 7 illustrates how household and farm tasks are allocated according to gender in the eight communities studied.

In focus group discussions in Putica, the fathers stated, "Women always help women." Girls work in the household and on the farm both before and after school. Only after their other chores are completed can they work on their homework. They do not have free time. As one father commented, "Women work without a schedule, from dawn to dusk; men work at certain times" (fathers focus group, Santa Rosa de Cochabamba).

Girls assume the major portion of the work around the house, although boys occasionally reported that they "help their mothers." Some mothers felt that the extent that they receive help from their sons depends on their children's upbringing. They asserted that if the parents teach boys to help out in the house, they are more likely to help. However, the cultural norm is very strong that women should do housework and men should work on the farms.

One woman in a Putica focus group described maturing girls this way: "Girls' behavior changes; they feel like adults; they have more responsibilities at home." One girl (EAP, S/E⁹) noted, "We do women's work, cooking, cleaning, as well as caring for the animals, weaving, embroidering, we do everything." A female leader from Nuñuhuayco-Patahuasi stated that her daughter "grinds very well, sometimes she helps me wash my clothes; she cooks for herself if I go out." This situation becomes more accentuated for the firstborn daughter. One woman from Pomacocha stated, "Yes, this is my oldest daughter, she has responsibility, especially for the younger children; when I tell her to, she cooks, she sweeps, she even serves us (her parents) like a daughter."

Boys assume more complicated tasks that require greater physical strength on the farm at the same age as girls experience menarche, but according to many respondents, they continue behaving like children at home and with their family members. One father from Santa Rosa de Cochabamba stated, "They don't help us much, or they go play; they are disobedient." Another father from the same community stated, "They don't help us; they like to play ball" (fathers focus group, Santa Rosa de Cochabamba). One woman stated, "Sometimes when they come from school, they study and go play ball" (EAP, Luyanta).

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⁹ Throughout the remainder of this report, sin educación (without education) will be denoted as S/E.

Gender role differentiation strongly influences adolescents' perceptions of their own skills and abilities. A description of skills that adolescent boys and girls believe they possess is presented in Appendix 8. From the description it is clear that the activities are different according to gender.

5.1.9 Future Aspirations

5.1.9.1 Girls' Dreams and Expectations

Despite few role models and limited opportunities, young girls interviewed in this study stated that they wanted to be teachers, doctors, engineers, and nurses. Studying and becoming a professional were perceived as means of social and economic improvement. Some girls indicated that they wanted to be mothers eventually, but not at present. They also noted that they wanted their children to have a better life than they as parents would have.

The girls' desire to succeed was expressed most strongly among those who had abandoned school. These girls' self-esteem was affected because they didn't study, as illustrated by one girl's statement, "Those who study and finish are worth something" (interview with girl in Pomacocha). During one interview, a girl felt sad when talking about this subject and started to cry.

Girls also expressed a desire to move to the city in order to work and rejected the idea of having a mate. One girl in Putica stated, "I would like to be alone because men mistreat you." Another girl from Santa Rosa de Cochabamba stated, "I want to be single. It's hard with a man – they make you suffer." Most of the girls interviewed did not want to have children or they wanted to postpone maternity until an age considered late by local social norms, which dictate that the average age for finding a mate and starting a family is 20 years old.

Against great odds, a few girls in the studied communities completed the entire cycle of primary and secondary school. These girls and their parents were asked how they were able to accomplish such a task. Responses to this question included "They are different from other girls" and "They have decided to finish." Generally, these girls had their parents' help and guidance. Financial support from the family was also important.

5.1.9.2 Boys' Dreams and Expectations

Boys, like the girls, imagined themselves achieving a higher professional status than their parents. One boy in a focus group in Santa Rosa de Cochabamba stated that he wanted to be "something more than our family." Some of the professions mentioned by the boys as a means to ascend socially were "teachers, engineers, lawyers, and doctors." Boys also highlighted certain options that are not so academically demanding but that also would allow them to work, such as "bricklayer, farmer, and driver." Some boys stated in focus groups that they would like to be mayor. Only one boy mentioned "getting married" as an expectation for adult life.

5.1.9.3 What Mothers Want for Their Daughters

Even though early marriage and motherhood have always been an integral part of Andean culture, it is clear from these interviews that many women do not want their daughters' lives to be like their own. They want them to study, to complete primary and high school, and to be professionals (teachers, doctors, lawyers, and engineers). They want them to leave behind the farm and the suffering that goes along with early marriage and motherhood in Andean culture. As one female leader from Nuñuhuayco said in reference to her daughter, "I don't want her to suffer like me. I don't even know how to read or talk well. Sometimes when I get a letter, I can't read it, and I have to ask someone else to read it to me, letting them know my private life."

They did not speak of expectations for their daughters involving marriage and having a family. These women stated very clearly that they themselves had not wanted to have many children, "When you have many children, it is very difficult to support their studies, to dress them." One mother in Luyanta used a harsh phrase that depicts the experience of maternity for many of these women: "A child is like having a broken hand, broken feet."

5.1.9.4 What Fathers Want for Their Daughters

Fathers have similar aspirations for their children. They dream, work, and sacrifice so that their daughters, like their sons, will have a future. They aspire for their daughters to complete primary school, high school, and eventually college. Fathers view education as a way for girls to obtain jobs, and jobs would allow girls to help their parents and their village.

Despite their hopes for their daughters' education, the fathers – unlike the mothers interviewed – expressed their expectations that their daughters have a family. As one father said, "It is preferable that men and women find mates and have a family."

5.2 What Aspects of Puberty Are Key to Girls' Decisions to Withdraw From School?

During the transition that begins with menarche, girls must deal with physical and emotional changes while coping with cultural traditions and school policies that interfere with their participation in education. Boys and girls in Ayacucho begin primary school between 6 and 7 years of age (which is close to the national average). When girls do manage to complete primary school, they are usually well into adolescence, and some have reached the age of 15 or 16. The average age for sixth graders interviewed in the GWE-PRA study was between 13 and 14 for girls and 14 for boys (2 to 3 years beyond the normal average age of 11). This pattern is mainly due to repetition in primary school and seasonal absenteeism (especially among children who are responsible for domestic and farm chores). Sixty-nine percent of the 108 school children interviewed stated that they had repeated one or two grades during primary school. Absenteeism is higher during the planting and harvest season. Many girls also miss school during their menstrual periods. Interviews also revealed that some girls repeat grades, particularly toward the end of primary school, because they wish to remain in school, and the possibilities for continuing on to secondary school are limited.

5.2.1 Keeping Girls Out of School During Menstruation

In rural Peru, the beliefs and taboos associated with menstruation strongly encourage girls to remain at home during their menstrual periods. The home is seen as a refuge for menstruating girls. It is considered the safest place, where their mothers can protect them. It is customary not to discuss menarche before it occurs, but once a girl has started menstruating, a new level of communication develops between the mother and daughter. This relationship is summed up by one informant in Pomacocha, "There is more closeness among women. Also, we both coincide [menstruate at the same time] so we support each other. We take care of each other, or we just decide that we have to take this in a better way." Although this support from mothers provides a nurturing environment for the girls, the practice of keeping girls at home during menstrual periods contributes to high rates of school absenteeism, repetition, and dropout.

5.2.2 Lack of Protection and Sanitation in School During Menstruation

Girls experience menstruation without adequate protection (sanitary products). Menstruation is particularly difficult in a school setting, where girls must sit for long periods of time. The prospect of staining their clothes with blood or being the source of unpleasant odor and the possibility that boys might notice that they are menstruating produces feelings of fear, shame, and uneasiness in the girls.

The discomfort they experience is often compounded by headaches and fatigue, along with other physical symptoms. To hide the effects of having their period with no protection, the girls remain in their seats and tie their friends' sweaters around their waists to cover themselves. They usually do not want to get up or move about during recess. They would like to disappear. In this context, girls do not pay attention in class and have difficulty following teachers' explanations. This seriously affects learning and contributes to poor achievement. Open discussions of puberty and sexual and reproductive health in class may help to decrease girls' discomfort. However, when faced with transmitting knowledge about sexuality and reproduction to a coeducational class, male teachers must overcome their own limitations and prejudices. Their ability to relate to girls and earn their trust depends in part on their understanding of and sensitivity to girls' experiences during menstruation. According to focus group participants, female teachers are more sensitive than male teachers with regard to teaching about puberty and menstruation.

5.2.3 Lack of Facilities in Schools for Menstruating Girls

In rural Ayacucho, the schools have no bathrooms, only latrines located outside of the school facility. In some cases, separate facilities for males and females do not exist. However, according to some respondents, "The boys would rather urinate against the wall, and the girls would rather urinate on the ground." One teacher in Santa Rosa de Cochabamba stated that the girls are disgusted because urine and feces accumulate in the latrines. "Sometimes there is a

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¹⁰ Some evidence exists that the physical and emotional experience of menstruation can negatively affect girls' academic performance. One study found that almost 20 percent of high school girls did less well on tests taken during the paramenstrum period, which is the 2 days prior to menstruation and the first 2 days of menstrual bleeding (Dalton, 1960, as cited by Weideger, 1980).

faucet, but there usually is no running water. They have to go wash in the mudslides or change in the open field or in a group, always with other girls."

The trash (including the pads that only the most fortunate can afford) is picked up, placed in boxes by maintenance personnel, and disposed of in a nearby field. In the best circumstances, it is burned. No other systems for garbage disposal exist.

Four of seven teachers (six male and one female) interviewed did not think that substandard educational facilities in rural areas affect the health and comfort of menstruating girls.

5.2.4 Physical Education Classes

One aspect of the general curriculum, physical education, seems to exacerbate girls' problems. The need for "physical education" to promote psychomotor development in children may not be as pronounced for boys and girls in Ayacucho. From the time they wake up until the time they go to bed, they are engaged in hard physical labor. Consequently, time spent in school is probably considered restful.

Physical education is not a priority in the local culture. Parents do not understand it; they refuse to cooperate and get upset when it is discussed. Farm women traditionally wear slips and several layers of skirts that practically cover their ankles. The teacher demands that girls wear shorts while parents order their daughters to wear skirts to class. To engage in some physical education exercises, they must do cartwheels or somersaults. If they are menstruating, these exercises can be very embarrassing for them because of their lack of protection or underwear. Girls usually use rags they make themselves, which do not prevent the blood from escaping when they turn or spin during physical education. Boys tease and make fun of the girls, which is extremely upsetting to them. Added to this is menstrual discomfort and chronic anemia that leaves some girls tired and lethargic. The negative feelings associated with this experience contribute to girls' decisions to avoid classes.

5.2.5 Sex Education at School

Sexuality is not an open topic of conversation among rural Andean families. Children and adolescents learn by observing adults and animals. Girls learn about menstruation once it happens. They sometimes get advice to be careful with men because they could become pregnant, but they receive little other information or direction. Young people do not discuss sexuality with adults. Fathers give their sons very general guidance regarding sex, but most children and adolescents are unaccustomed to asking questions.

It is understandable, then, that a sex education class is awkward for most young people. It often awakens curiosity in boys and upsets girls. Nevertheless, some teachers have begun to discuss sexuality and reproduction in school. ⁺ In 1996 the Ministry of Education initiated the National Program of Sexuality Education.

The objective of the program is to develop materials and train teachers about sexuality education

at primary and secondary levels, with the objective of introducing sexuality education in all schools.

Sex education counts as a course in social studies or "Natural Science in Orientation and Well-Being of the Student." It may also be provided in 10- to 15-minute blocks during every class in order to "guide them" (Luyanta teacher). Some teachers said they do not have enough time to teach the subject. Although school curriculum was not the focus of this research, the sexual and reproductive health curriculum was assessed to determine whether it properly addressed the needs of menstruating girls. The topics covered include menstruation, reproductive functions, pregnancy, contraception, marriage, and family. About 55 percent of the girls interviewed stated that sex education is not taught in school; 30 percent of boys said that they do not receive instruction on this topic.

In some places, schools have made arrangements for a nurse to teach a class on "Sex and Sexuality" once a week. In these classes, the human body, menstruation, the psychosexual development of men and women, self-esteem and respect are discussed. Young people are counseled in health centers on many issues they face during puberty. The information presented in health centers is usually more structured and current than that taught in classes.

6. CONCLUSIONS

In this section we address the extent to which evidence from the study supports our initial hypotheses and draw conclusions from the findings. The study employed primarily qualitative techniques. As stated in the methodology section, no attempt was made to test hypotheses statistically or to make generalizations about the population outside the Ayacucho area.¹¹

Hypothesis 1: Menarche changes a girl's self-perception and her relationship to her environment.

Section 5.1.3 describes how puberty and menarche are perceived in Andean culture. The responses of girls interviewed individually and in focus groups provided evidence to support hypothesis 1. These girls described a number of ways in which their perceptions of themselves change once menarche occurs. With that shift in perception comes a substantial increase in responsibilities, with girls assuming a much larger share of the domestic and farming chores (see Section 5.1.9). It is also expected that girls will soon marry and become mothers. Once

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¹¹ To avoid creating the impression that such inferences are possible with the level of data collected in this research, the hypotheses should be viewed as statements that may be more or less confirmed or not confirmed based on general observations from the focus group discussions and interviews with respondents. We have not used the convention typically employed when statistically testing hypotheses of wording the hypotheses in null form and then rejecting or failing to reject the null hypothesis. To do so would imply a level of statistical rigor that is not possible with this type of study.

menstruation occurs girls consider themselves women rather than girls. Many negative feelings also arise at this time. Typically, when a girl in this culture is menstruating, she perceives herself negatively. She feels dirty, she is disgusted, and she "gets bored." Sometimes she wishes she were male so she wouldn't have to menstruate every month.

After menarche, the community sees a girl as a sexual object. She is perceived as potent because she can have intercourse and engender life. By some, she is also believed to hold certain powers during menstruation, such as withering plants by her touch and making babies sick. At menarche, she is recognized as a woman and an adult rather than a girl or adolescent.

Hypothesis 2: Culturally, menarche provokes changes in the way a girl is perceived by those in her environment.

The girls' own perceptions of their transition to womanhood and its implications were shared by other members of the family and community (parents, teachers, and community leaders) interviewed in this study. Menarche is seen as a symbol of the transition from childhood to adulthood. For girls from rural areas in Ayacucho, menarche produces changes that radically affect their lives and their schooling. Girls begin to take on the reproductive and productive roles of adult women. Their status as a resource for their family, especially their mother, is accentuated. At this time, formal education conflicts with cultural perceptions of female sexuality and roles.

After menarche, a girl begins to perceive herself as shameful and her surroundings as frightening; her peers and most adults seem judgmental. Men become dangerous. School absenteeism increases among adolescent girls, who often want to stay home because they are very uncomfortable menstruating in school but feel safe at home with their mothers (see Section 5.2.1).

Hypothesis 3: Formal education is not accommodating to menstruating girls.

(a) Physical discomfort and unpleasant feelings (odor, stained clothing) resulting from menstruation generate school absenteeism and a perception of the need to stay at home.

In rural areas of Ayacucho, especially, menstruation is very unpleasant and difficult for girls in school. For many girls, menarche comes as a surprise since they have received no information about it beforehand, either at home or at school. Fear and shame, exacerbated by classmates' mocking, were the main feelings girls expressed about their first menstruation.

(b) Menstruating girls and women are seen as having both special power and at the same time experiencing temporary vulnerability. They require special attention during menstruation.

In the rural Andean world menstruation is accompanied by a series of myths and beliefs that have partially been dispelled among those who have obtained more knowledge about the body and its

functions. Many of these beliefs center around restrictions concerning hygiene (use of cold water or protective pads), nutrition (eating foods such as milk, fruit, and candy), and carrying out daily activities (traveling, carrying loads, participating in physical activities). Other taboos prohibit women in some communities from touching children, handling plants, or attending church services (see Section 5.1.4).

(c) Due to beliefs that menstruating females are fertile, girls and women may remain at home to protect themselves from the possibility of becoming pregnant or being sexually abused.

Although it is believed that some days are "dangerous" (when a woman is fertile), a great deal of confusion exists about the possibility of conceiving during menstruation. Some women believe that menstruation marks a woman's fertile period. Largely because of information distributed by health care workers, women have more accurate knowledge about the menstrual cycle and conception.

(d) The school environment does not make it easy for the girl to attend and participate during menstruation because of the lack of facilities, water, and sanitary supplies, and the distance from home to school.

Schools lack bathroom facilities and running water, which are essential for adequate menstrual hygiene. The long distances from school to girls' homes pose an increased risk of being attacked on the way home from school, especially for girls who are known to have started menstruating.

(e) Attitudes and rules in school (such as obligatory participation in physical education) do not respond to girls' needs.

Most girls do not wear sanitary pads or use tampons during menstruation. In a school setting, the only protection they have is multilayered skirts or strips of cloth. The school rules are not compatible with local conditions and girls' needs. Girls are required to participate in physical activities even when traditional dress and lack of protection make it difficult to do so.

Hypothesis 4: Menarche signals the time at which girls abandon school.

- (a) Socially, menarche signifies the end of childhood for girls. Their gender-specific roles are reaffirmed, and they begin to focus more attention on domestic tasks traditionally assigned to women. The perception that girls don't need to continue their studies is reinforced.
- (b) Because at menarche girls are now suitable for having sexual relationships, they are at risk of sexual abuse and early pregnancy. It is thought that their sexuality should be controlled and protected.

The study revealed conflicting evidence related to hypothesis 4. On one hand, parents and community members confirmed that menarche is perceived as a signal that a girl has become a

woman and can now have intercourse and conceive (see discussion of hypothesis 2). Respondents indicated that some girls become sexually active around the age of 12 or 13 and that girls are at a greater risk of sexual abuse once it is known that they have had their first period. Interviews and focus group discussions reveal that parents begin to promote a girl's withdrawal from school when she reaches puberty. However, most parents also reported that they wanted their daughters to obtain an education, which they hoped would lead to their finding good jobs to help support the family (see Section 5.1.9.4).

There appears to be a gap between what parents say they want for their daughters and the messages they send regarding expectations of their daughters. Although parents believe that education leads to a better life, when faced with the immediate demands of daily existence, they persist with traditional expectations and practices of valuing girls' contribution to the home over their education. Thus, parents exert tremendous pressure on adolescent girls to fulfill their household responsibilities and prepare for their roles as wives and mothers. The possibility of realizing expectations of a professional adult life are also severely constrained by families' extreme poverty. Families cannot afford their children's studies and force children to withdraw from school so they can work in domestic and productive chores. Girls' opportunities are further limited by the perception that once they begin puberty, home is the safest place for them.

(c) Socially and sexually, girls feel uncomfortable with their rapid physical development and the emotional changes accompanying puberty.

Lack of information about their bodies and the emotional changes of puberty, combined with teasing and harassment by male peers, contributes to girls' discomfort with the changes they encounter during puberty.

(d) Discomfort from menstruation, aggravated by anemia and malnutrition, contributes to poor school performance, absenteeism, and school dropout.

Many children in Ayacucho are chronically hungry and malnourished. Normal discomfort associated with menstruation becomes more acute when accompanied by malnutrition and anemia. This combination often results in listlessness, lack of attention, and loss of concentration, which contribute to poor performance, absenteeism, and dropout (see Section 5.1.6).

7. IMPLICATIONS FOR POLICY

An important question for this research was, "What role does puberty play in girls' attendance and retention in school?" A number of factors affecting adolescent girls' school participation were identified. These are summarized in Table 3 (at the end of Section 8), and various policy options are presented, including those that affect the school, the community and family, and the system. Table 3 lists policy options related to the central questions of this study.

7.1 School Policies

7.1.1 Barrier: Infrastructure and policies

7.1.1.1 Policy option: Provide girls with access to sanitary products.

This study identified the lack of access to sanitary facilities and products as a major impediment to girls' attendance and retention in school. Access to free or inexpensive sanitary products and instruction in how to use them may improve attendance and participation in school activities due to increased comfort and privacy, and freedom from shame. Either government or manufacturers and businesses could supply these products (by providing their products free or at cost, manufacturers of sanitary products would aid school girls during the critical transition through puberty and expand their future client base at the same time).

Potential benefits: (1) sanitary products protect girls' from clothing stains, thus preventing the shame experienced in school; (2) using sanitary products makes it easier for girls to participate in physical activities; and (3) absenteeism and dropout rates among adolescent girls may be lowered.

7.1.1.2 Policy option: Provide all schools with access to running water and separate bathroom facilities and authorize exemption of menstruating girls from physical education as needed.

Another barrier to girls' comfort in school is the lack of running water and separate and maintained bathroom facilities in the schools. Providing access to running water and separate bathroom facilities would give girls greater privacy and may result in lower absenteeism and dropout. Given extant cultural practices in Ayacucho, girls may benefit from efforts to teach them about why using sanitary facilities is healthier than using an open field or brush area.

Potential benefits: (1) increased privacy and comfort for girls; (2) healthier sanitary practices may decrease morbidity in general; and (3) decreased absenteeism from school.

7.1.1.3 Policy option: Provide greater safety for girls in school.

Actual and perceived threats to girls' safety in school is another barrier to their education. To reduce the risks that girls face in school, the following policy options should be considered: (1) ensure that doors and windows in toilet facilities are workable and lock properly; (2) provide education in schools on violence and sexual abuse and harassment; (3) establish class schedules (in coordination with the Asociación de Padres de Familia and local community organizations), ending no later than 2 or 3 o'clock in the afternoon so that girls can get home safely; and (4) initiate single-sex schools on a pilot basis.

National Ministry of Education policies regulate the school schedule and the number of hours of classroom instruction. Currently, schools are expected to provide 6 hours of instruction per day, but these standards are rarely applied consistently, and the law allows

for adjustments to be made according to local circumstances. Both children and teachers in rural areas generally arrive late to school due to the distance they must travel. Some schools continue classes until late in the afternoon, thereby making it necessary for children to walk in the dark for at least part of their journey home. School schedules in rural areas should be arranged so that classes are completed by 2 or 3 o'clock in the afternoon without reducing the number of instructional hours.

Potential benefits: (1) increased security for girls; and (2) reduction in gender violence and abuse of girls (sexual, verbal, psychological); and (3) improved educational achievement and retention in single sex schools.

7.1.1.4 Policy option: Provide flexible curriculum options that reduce girls' homework assignments and allow girls to work at own pace.

One option for adapting to girls' workload at home is to develop educational methodologies and materials to train teachers in active classroom methodologies, group work, and projects with the aim of intensifying activities during the school day and not assigning homework. This would allow girls to both attend school and fulfill domestic responsibilities.

The development of self-instruction guides that allow students to perform school work independently would allow girls to keep up with class assignments if they miss school during menstruation.

Potential benefits: (1) improved classroom instruction and learning; and (2) decreased competition between school requirements and household chores, allowing girls to accomplish both tasks; (3) improved educational materials; and (4) greater inclusion of girls in educational activities.

7.2 Community and Family Policies

7.2.1 Barrier: Inadequate provision for girls' safety

7.2.1.1 Policy option: Establish neighborhood watches and work with women's groups in each community.

Gender-related violence is a problem in rural Ayacucho. As evidenced by this study, in some places girls are in danger of being attacked or abused at home, on the way to school, or even in school by their teachers. To create more awareness about this issue and decrease the level of violence against adolescent girls, several policy options are suggested. One is to establish a neighborhood watch for protection against gender-related violence and sexual abuse.

Another approach is to work closely with community-based women's organizations to report cases of gender-related violence and sexual abuse and to develop strategies for follow-up. The benefits of such policies include involving the community in finding solutions to this difficult problem and bringing problems that have previously been ignored into public

consideration. The limitations of this approach are that actions against offenders may be difficult to enforce and interventions may be met with resistance from community members who may not be willing to confront the abusers, especially if they are prominent members of the community.

Potential benefits: (1) decrease violence against and abuse of girls; and (2) increase community awareness about gender violence.

7.2.2 Barrier: Inadequate health and nutrition

7.2.2.1 Policy option: Improve the nutrition and health of adolescent girls.

Further research is needed on the health and nutritional status of adolescent girls and the special health problems posed by menstruation.

The most common solution to malnutrition has been supplementary feeding programs. School feeding programs have been implemented to offset the immediate negative effects of hunger and malnutrition and to increase attendance by offering food as an incentive (McGinn and Borden, 1995). Feeding programs are also suggested as an incentive to raise girls' enrollment and attendance by offsetting some of the costs of attending school (King and Hill, 1993).

However, research has shown that unless programs are designed to address specific nutritional needs, they seldom lead to increased performance and attendance. For the most part, school breakfast programs have had greater success than school lunch programs. In Jamaica, for example, a school breakfast experiment led to higher rates of attendance and improved scores on mathematics tests. However, such programs are expensive to maintain and may reduce instructional time (Pollitt, 1990). According to McGinn and Borden (1995), the most effective nutritional programs are those that are implemented in conjunction with other health care initiatives and intellectual stimulation. Although feeding programs for children are most often located in schools, this is a community issue and requires community leadership to assure coordination between home, health facilities, government projects (such as PRONAA) and school.

Potential benefits: (1) improved nutritional status resulting in improved education achievement; (2) improved school attendance.

7.2.3 Barrier: Increased work responsibilities for girls and lack of support for girls' education and development.

7.2.3.1 Policy option: Decrease girls' household responsibilities.

As stated in Section 5.1.8, the workload for girls increases significantly during adolescence, particularly for domestic tasks. One policy option for decreasing this workload is to create greater awareness among community members of the benefits of educating girls. A way of accomplishing this is to form working groups to discuss issues related to girls' workload, school

participation and education achievement. Involving community leaders and officials will foster support and ownership of the problem and may lead to a reduction in domestic tasks for adolescent girls.

7.2.3.2 Policy option: Promote advocacy and social mobilization.

Even though girls and their parents in the GWE-PRA study expressed the desire that the girls complete their education and pursue careers, the constraints and pressures that girls face when they reach adolescence make it unlikely that they will be able to do so. Myths surrounding menstruation and taboos that restrict the kinds of activities in which girls should engage during menstruation interfere with their school attendance and often prevent their full participation in class. Another major hurdle to girls' school participation is the increased responsibility they experience at puberty. Reducing the burden of responsibility for household tasks on girls at this critical juncture could substantially increase their chances of completing school.

For this to happen, parents must recognize the importance of investing in their daughter's education and believe that the benefits are sufficient to forego the social and economic benefit from a girl's contribution to the household if she were not in school. There are a number of ways of effecting such attitudinal and behavioral changes. One approach is to initiate campaigns aimed at sensitizing parents about the benefits of girls' education. Another is to hold community meetings and formulate working groups to discuss issues related to girls' workload and its impact on the demand and support for girls' education.

Advocacy and social mobilization provide impetus for raising awareness, demand, and support for girls' education. UNICEF (1992) contends that such strategies are especially important in rural areas, where parents have little education and are not aware of the benefits of educating girls; in areas where attitudes about girls are very traditional and where girls are not allowed to play a role outside the home; or in very poor areas where parents feel they must choose between educating girls or boys. UNICEF recommends that a successful social mobilization campaign should have an action plan prepared by a representative group of educators, parents, and social advocates. Strategies are more effective if based on the needs and characteristics of the target audience and include messages that will persuade the audience of the importance of girls' education.

Studies have shown that educational models incorporating community participation can be particularly useful in increasing the education of disadvantaged groups, such as girls, rural populations, and the poor (Rugh and Bossert, 1998). In addition, involving community members in efforts to increase awareness and build support around particular issues, such as the education of girls, better enables them to address other significant issues in their lives (Wolf, et al., 1997).

Awareness campaigns may involve publicizing messages through the media (radio, television, newspaper) or employing techniques such as Theater for Development with possible themes about reduction of domestic tasks for girls or the value of staying in school. Media campaigns advocating for girls' education have been relatively successful in a number of countries, including

Malawi (Burchfield, 1996), Tanzania (UNESCO, 1989 in Tietjen, 1991), and China (Tietjen, 1991).

7.3 System Policies

7.3.1 Barrier: Insufficient collaboration between government and civil society organizations and entities

7.3.1.1 Policy option: Reinforce existing relationships between the private and public sectors to strengthen and promote actions in favor of girls' education.

Policy reform efforts and initiatives within and outside the education sector have an impact on girls' participation and attendance in school (King and Hill, 1993). As resources become increasingly scarce and competing interests proliferate, it has become clear that governments cannot work alone. The active support of government, community leaders, and members of community-based organizations is key to successful interventions.

Evidence from efforts in other countries (e.g., Pakistan, Bangladesh, and Malawi) has demonstrated that partnerships between NGOs and public institutions can be a powerful tool for social progress. According to the World Bank:

The government can benefit from greater community outreach, innovative ideas, and more efficient delivery of services. NGOs can benefit from securing regular sources of funding, thus enabling them to reach a much larger number of people, and having some of their ideas institutionalized. These partnerships are likely to be more fruitful if they take full advantage of the different resources and perspectives that each partner can bring (World Bank, 1995b, p. 3).

Collaboration in the Ayacucho region, for example, could be further improved by supporting existing relationships among private and public sector institutions that carry out initiatives to improve education and by further expanding and strengthening local networks to support girls' education.

8. **RECOMMENDATIONS**

To have lasting impact, research on girls and women's education must be linked to concrete actions. These actions must take place at several levels, involve a wide range of stakeholders, and be implemented in tandem with national strategies for girls' and women's education. Effecting change is a long-term and incremental process, necessitating innovative approaches that give stakeholders a genuine role in the process and give them a sense of ownership of the solutions.

Achieving the full participation of girls and women in educational activities requires a fundamental shift in how decisions are made and resources are allocated. It is not just a question

of how parents view their children's education but also of how teachers relate to girls and boys in the educational setting. This change also requires a shift in the way policy makers allocate resources and assume responsibility for educating all citizens.

Effective educational activities for girls and women require collaboration between the formal and nonformal education sectors as well as between private and public sectors. Sustainable educational activities for girls and women depend on the development of local ownership of activities. Implicit in local ownership are the involvement, commitment, and coordination of decision makers in government, local community and religious leaders, and community members themselves.

This study identified a range of policy options for addressing problems associated with puberty and menstruation. Some of the recommended actions require the allocation of additional resources by the public sector (whether it be the Ministry of Education or one of various other ministries that regulate budget allocations, school infrastructure, health services, potable water systems, school feeding programs), as well as contributions from community members. Other actions necessitate changes in rules and regulations and in traditional ways of responding to problems. Among the options most directly related to the issues of girls and menstruation are suggestions for addressing the physical barriers posed by menstruation, including increasing resources for latrines with separate facilities for girls and boys, running water for washing, and free or subsidized sanitary napkins. The government might provide additional funding to build latrines and supply running water, and community members may be able to contribute labor and local materials. Free or subsidized sanitary products might be provided through a combination of sources, including the government, donor agencies, private businesses, or NGOs.

However, as interviews and focus group discussions with respondents have shown, providing these resources may not be enough to change girls' behavior. Resources must be accompanied by information and education about the important health benefits (both physical and emotional) to be gained from using sanitary supplies and facilities. Discussions about cultural and other barriers to change would increase children's and families' awareness of the supportive and restrictive aspects of community customs and traditions. Assuring adequately trained teachers and appropriate materials would contribute to addressing health issues related to menstruation and reproductive health.

Schools should implement policies that take into account girls' special needs during menstruation (e.g., exemption from certain physical education activities, opportunity to rest during the day, time to use sanitary facilities).

At the community level, actions to increase girls' safety include establishing a neighborhood watch, involving community members in following up on gender-related violence, and providing adult education on issues of sexual abuse and domestic violence. Girls' safety at school would be increased by altering the school schedule in remote areas so that classes end earlier in the day.

Several measures could help girls overcome the negative impact on their schooling associated with increased household responsibilities assumed when girls reach menarche. Recommendations include using media campaigns and community meetings to educate families and community members about the importance of educating girls and the effects of increased household responsibilities on their education.

Research in rural areas on the relationship between menstruation and nutrition and providing supplements for school breakfast programs would contribute to knowledge about and alleviation of problems caused by malnutrition and anemia, and exacerbated by menstruation.

Finally, it is recommended that existing coordination and collaboration continue among private and public sector institutions that carry out initiatives to improve education in Ayacucho. One option is to expand the local network affiliated with the Red Naciónal de Educación de la Niña to incorporate more local communities and community-based NGOs in its efforts to promote girls' education.

To achieve ownership of and support for possible solutions, it is proposed that findings of this study and recommendations that follow be discussed in public forums attended by those most affected and those who are responsible for implementing policies, including girls, parents, teachers, community leaders, and government officials at the local, regional, and national levels. Table 3 details the benefits and limitations of suggested policy options. The relative merits of each alternative should be more fully explored and prioritized with input from those most affected. Additionally, for each option, the costs and benefits, as well as the appropriate implementing entity should be determined in conjunction with local stakeholders.

Table 3: Summary of Policy Options

Barriers to Education	Policy Options	Benefits	Limitations
School Policies			
Infrastructure and	d Policies		
Lack of access to sanitary facilities and products	 Provide girls with free or inexpensive sanitary products Educate girls about using sanitary products 	 Prevents potential embarrassment from soiled clothing, odor Allows girls to participate in physical activities Increases girls' comfort in school 	 Costs may not be sustainable Sanitary habits may inhibit acceptance Creates additional solid waste
	Ensure that all schools have clean and maintained toilet facilities with access to water	 Improves sanitary conditions and health practices Improves girls' comfort 	Water may not be available or affordable in all areas
	Ensure that all schools have separate toilet facilities for males and females	 Provides girls with greater comfort and privacy May protect from sexual harassment 	Cost
Discomfort during physical education when menstruating	Exempt girls from certain physical education activities during menstruation	Improves girls' comfort in school	May isolate menstruating girls
Risk for girls due to irregular school hours and long walks home in the dark	Establish an uninterrupted class schedule with classes concluding no later than 2 or 3 p.m.	Provides girls with greater safety	Takes time away from instruction

Barriers to Education	Policy Options	Benefits	Limitations
Inadequately trained teachers	Train teachers from preschool through high school in the areas of health, growth and development, and reproductive health	Teachers are more sensitive to special needs of girls during puberty and provide greater support	 Attitudes are not easily changed Outcomes are long term rather than immediate
Lack of or irrelevant educational materials	 Train teachers from preschool through high school in integration of health themes into the curriculum Assure full supply of age-appropriate family life education materials in Spanish and other native languages 	Teachers and students who understand health issues contribute to dispelling myths and creating an atmosphere of increased understanding of reproductive health issues	 Sexuality and gender issues are not discussed openly in Andean culture Teachers (primarily male), parents, and children may resist learning and talking about sensitive health issues in the classroom
Traditional teaching methodologies that do not consider individual student needs	 Train teachers in active classroom methodologies and group work with the aim of accomplishing more learning during the school day and assigning less homework Develop self-instruction modules that allow girls to work at own speed and make up work missed during menstruation 	 Increased efficiency in the classroom allows for more learning and may require less homework Self-instruction guides allow more flexibility in meeting classroom requirements and allow girls to make up for time out of school during menstruation 	 Girls' workload at home may increase Less time spent in formal learning activities Requires intensive teacher training and supervision

Barriers to Education	Policy Options	Benefits	Limitations
Community and l	Family Policies		
Inadequate Provis	sion for Girls' Safety		
Gender-related violence; sexual abuse of girls	Establish a neighborhood watch in each community to protect girls against gender-related violence and sexual abuse	 Involves community in finding solutions Increases public awareness of traditionally hidden problems 	Actions against offenders may be difficult to enforce
	Work with women's organizations to follow-up and to report cases of gender-related violence and sexual abuse	Local organizations are trusted and can be effective in helping to resolve problems	May meet with resistance in pursuing abusers
	Include education on violence and sexual abuse and harassment in community meetings	 Reduces sexual harassment and abuse Provides greater safety for girls 	May meet with resistance
	Conduct research on efficacy of implementing single-sex schools on a pilot basis	 Provides environment that may be safer for girls Offers more opportunity for participation in classroom activities 	 Limits male-female interaction and development of relationship skills May involve greater cost

Barriers to	Policy Options	Benefits	Limitations
Education			
Community and l	Family Policies		
Household respon	sibilities that limit school	participation	
Girls' workload and gender role expectations	Public messages that promote decreased domestic tasks for girls and emphasize the value of staying in school	 Creates greater awareness of importance of education Involves the media, community leaders, and schools in campaigns for girls' education 	 Messages may meet resistance from community members and schools Persistent poverty maintains families' reliance on girls' contribution to household economy

Barriers to Education	Policy Options	Benefits	Limitations
	Establish community working groups to discuss issues related to girls' workload and girls' participation in education	 Involvement of community leaders builds support for girls' education Girls have more time to concentrate on schoolwork, leading to improved academic achievement and school retention Helps to create greater awareness of importance of education 	Community members have limited time for meetings and new projects
Inadequate Health	a ana Nutrition		

Barriers to Education	Policy Options	Benefits	Limitations
Poverty and inadequate health and nutrition of children and adolescents	 Seek support for greater community/family economic and productive activities Improve school feeding programs Provide nutrition education Work with Asociación de Padres de Familia (APAFA) (School Parents' Association) to improve nutritional quality of school breakfasts Introduce supplements, especially iron 	 Improves capacity of families to provide nutritious food Improves health and nutrition of school children Decreases impact of menstruation on health of adolescent females Improves school performance 	 Cost Girls not in school do not have access to school feeding programs Sustainability

Barriers to	Policy Options	Benefits	Limitations
Education			
System Policies			
Public/Private Colle	boration		
Need for collaboration between public and private organizations and agencies	relationships	intervention improve gire education in areas Increases awareness of importance education for a large services in rural areas intervention improve gire education in areas Increases opportunition quality basic education for in rural areas ted	business sector, n rural NGOs, and the government of the of respond to or girls other equally pressing needs and or girls or girls or girls or girls

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Appendix 1
Table A1: Barriers to Girls' Education Worldwide

Supply-Related Factors	Research
Accessibility	 Research findings indicate that the farther children live from school, the less likely they are to enroll in school, and if they do enroll, the more likely they are to drop out (Anderson, 1988). In Egypt, Morocco, and Tunisia parents are reluctant to send their daughters to distant schools because they fear exposing them to risk and peril (King and Hill, 1993). In a number of communities (e.g., in Bangladesh, Malawi), ensuring that schools are closer to the girls' homes decreased parental concerns about sending girls to school (UNICEF, 1992). In Bhutan and Bangladesh, satellite schools were found to have a positive effect on girls' enrollment (USAID, 1990, 1985). In Malaysia, satellite schools had a negative effect on girls' enrollment (DeTray, 1998 in Tilak, 1989; Tietjen, 1991) but a positive effect on girls' persistence in school. (Wang, 1983 in Tietjen, 1991).
Latrines	 In Bangladesh, parents have withdrawn girls but not boys from schools without latrines (King and Hill, 1993). National policies in Morocco require every school to provide clean water and separate enclosed school latrines for girls and boys (UNICEF, 1992).
Flexible scheduling	 In Colombia, flexible scheduling had positive effects on girls' access and achievement (Coclough and Lewin, nd, in Tietjen, 1991). Flexible school calendars and scheduling (part-day programs) help accommodate girls' needs (e.g. Community Schools in Pakistan and Egypt; Bangladesh Rural Advancement Committee in Bangladesh, where parents and teachers decide on the school schedule) (UNICEF, 1992).

Supply-Related Factors	Research
Female teachers as role models	 Women teachers provide positive role models for girls and enhance girls' enrollment and retention. In many cultures of South Asia and the Middle East, women teachers often reduce parental concerns about their daughters' morality and security and therefore increase girls' participation in schooling (UNICEF, 1992). In Nigeria (Biraimah, 1987 as cited in Tietjen, 1991) and Botswana (Fuller and Snyder, 1991) women teachers provided positive role models and had a positive effect on girls' achievement; in Togo, they had a negative effect (Biraimah, 1987b as cited in Tietjen, 1991). In Yemen, the Philippines, and Nepal, the presence of women teachers had a positive effect on girls' enrollment; in Ethiopia, it had no effect on girls' attainment (USAID, 1984 and Tilak, 1989 in Tietjen, 1991; Shrestha, et al., 1986).
Availability of textbooks and learning materials	 King and Bellew (1989) found that textbooks had a positive and statistically significant influence on the educational attainment of girls in Peru. Several studies done in Latin America conclude that textbooks transmit gender stereotypes. The books reviewed portray women as housewives and mothers with no power to make decisions (King and Hill, 1993).

Demand-Related Factors	Research
Social and cultural traditions and biases	 Deciding whether or not to send a daughter to school is often influenced by social norms related to marriage and sexuality. In some countries, girls are expected to leave school to get married. In other countries, schools are directly influenced by communities' cultural standards. In many countries in parts of the Middle East, North Africa, East and South Asia, and Africa's Sahelian region, girls' and women's activities are governed by social practices that restrict their presence in public places and their interaction with males.
Parental education	 In Ghana, female students in secondary schools are likely to come from families with more education (King and Hill, 1993). In Peru the father's education has twice the impact on the sons' schooling as the mother's education does, whereas the effect of each parent's education on the daughters' schooling is equally strong and positive (Hill and King as cited in King and Hill, 1993). In Egypt, if income is held constant, parents' education has the most influence on the educational aspirations of children in both rural and urban areas (Hyde in King and Hill, 1993).
Family income	 Poor mothers in rural or urban areas are more likely to place less importance on formal education than are mothers who are better off (UNICEF, 1992). Socioeconomically advantaged families tend to enroll and keep their daughters in school unlike daughters of disadvantaged families (King and Hill, 1993). In many societies, direct costs for schooling of girls (e.g., for tuition, textbooks, uniforms, supplies), and opportunity costs (e.g., reduction in household tasks, sibling care, and agricultural and marketing responsibilities when girls are in school) are perceived as greater than the benefits (UNICEF, 1992). In many societies, parents see limited economic benefits to educating their daughters. In Nicaragua, higher predicted earnings for women correlate with greater educational attainment by women (King and Hill, 1993).

Demand-Related Factors	Research
School feeding programs	 "Modest school snacks or breakfasts alleviate short-term hunger and its impact on emotional behavior, arithmetic competence, reading ability and physical work output. Supplementing iron, iodine, or Vitamin A should be a high priority where deficiencies are prevalent" Lockheed et al., 1991, p. 84). The study of breakfast programs in Jamaican schools supports the above assertion (Lockheed et al., 1991). "Providing school lunches rather than breakfasts is of questionable value, since they are rarely designed to meet nutritional goals" (Lockheed et al., 1991, p. 84). Few studies have examined the statistical impact of
	 competence, reading ability and physical work output. Supplementing iron, iodine, or Vitamin A should be a high priority where deficiencies are prevalent" Lockhe et al., 1991, p. 84). The study of breakfast programs in Jamaican schools supports the above assertion (Lockheed et al., 1991). "Providing school lunches rather than breakfasts is of questionable value, since they are rarely designed to meet nutritional goals" (Lockheed et al., 1991, p. 84)

Appendix 2 Problems That Affect Adolescents' Lives

When boys and girls were asked to describe problems that affected their lives, they reported a wide range of difficulties. Many of the same problems were noted by boys and girls and were factors that played a key role in keeping them out of school. Both cited poverty, the death of a parent, domestic violence, and the breakup of the family. Boys usually described parental conflict in terms of "arguments," whereas girls referred to "domestic violence."

Both girls and boys mentioned academic difficulties, but these were listed less frequently than economic and family problems. Early pregnancy and domestic chores figured prominently in the girls' problems but were absent from the boys' list of issues affecting their lives. Most of the problems listed were more likely to affect girls' than boys ability to continue in school. For example, the death of a parent or parents' separation often results in girls' leaving school to take on household responsibilities but boys may be allowed to continue.

Table A2: Problems Affecting the Lives of Adolescents

Girls	Boys	
 Family conflicts, domestic violence and the breakup of the family for various reasons (e.g., death of a parent, separation) Teen and unwanted pregnancies Poverty and precarious living conditions that affect their studies Overload of domestic and farm work that causes absenteeism from school Problems in academic performance due to lack of study time (burden of domestic chores), inappropriate teaching methodology, and language problems (girls are less fluent in Spanish than boys) 	 Family problems, such as the death of a family member, an argument between parents, accident and parents being away from the home Conditions of extreme poverty Farm work Problems related to academic performance 	

Appendix 3 Age of Menarche

Table A3.1: Menarche, Menopause, and Duration of Reproductive Life Among Women at Sea Level and Higher Altitudes

Place of Origin by Altitude	Age at Menarche (Years)	Age at Menopause (Years)	Duration of Reproductive Life (Years)
Sea level	12.04 ± 0.15	48.9 ± 0.43	35.4 ± 0.15
Greater than 3,400	14.13 ± 0.17	44.1 ± 0.39	30.7 ± 0.12
meters above sea			
level			
Migrant	13.62 ± 0.26	48.4 ± 0.15	34.7 ± 0.43

Source: Padilla, R., W. Sifuentes, F. Garmendia, J. Alarcón, and A. Fernández. 1996. "La Vida Reproductiva de la Mujer Residente y Migrante de Altura." *Revista Médica Peruana*. Vol. 68 No. 354. Lima, Peru.

Table A3.2: Menstruation Data for Girls in Girls' and Women's Education Policy Research Activity Study

Age	Number of Girls Who Began Menstruating at This Age	Number of Girls Who Have Not Begun Menstruating at This Age
11	0	1
12	3	10
13	10	10
14	14	1
15	3	1
16	3	0
Total	33	23

Appendix 4

Perceptions of Changes in Puberty by Parents and Adolescents Participating in the Study

Table A4.1: Adolescents' Perceptions About Changes Taking Place During Puberty

Changes in Girls	Changes in Boys	
Breasts develop	 Voice becomes deeper 	
 Body develops and changes shape 	 Hair develops around penis and nipples 	
 Hips become wide 	 Muscles get stronger 	
Waist narrows	 Shoulders, arms and legs get wider and 	
 Skin on face breaks out 	larger	
Legs change	 They become stronger 	
 Pubic and underarm hair develops 	 Body becomes more agile, we are capable 	
 Buttocks develop 	of jumping better	
Curves develop		

Table A4.2: Parents' and Girls' Perceptions of Emotional Changes during Puberty

Parents' Perceptions	Girls' Perceptions
 My daughter began to get restless. 	Our way of thinking changes.
• She takes care of herself; she is clean.	My personality has changed.
• She makes herself pretty, all by herself.	• I no longer felt like a girl; I felt like a
• She doesn't want to walk around with	woman; I liked being like my mom.
messy hair.	
• She has a separate room.	
• She wants to have friends, go out.	
Her personality develops.	

Appendix 5
Table A5: Menstrual Symptoms Reported by Adolescent Girls

Physical	Emotional
Waist hurts	Boredom
Headaches	• Sadness
Lack of appetite	Lack of interest
• Sleepiness	• Uneasiness
• Thinness	 Nervousness
Feel sick	Insomnia
Decreased physical activity	Wanting to be in bed
Stabbing pain in stomach	Suffering
• Pale	Crankiness
Weak	Bad mood
• Cramps	Irritability
Toothache	Personality becomes weak
Yellowish face	
Hemorrhages	
Numbness in body	
Backaches	
• The "eye becomes dark" (blurred	
vision, dizziness)	
• Susceptible to illness, such as a cold	

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Appendix 6 Perceptions of Male and Female Roles

Girls' and Women's Perceptions

The responses of a number of girls and women interviewed in this study suggest that they place less value on being a woman than on being a man. When asked which sex they would rather be if they had a choice, many of the girls and women interviewed emphatically stated that they would rather be men. Their rationale for this sentiment reflects the value they and society in general place on the male identity. The following are quotes from girls and women who commented on the benefits of being male.

- "[Men] earn more by working." (girl, S/E, Putica)
- "[Men] are able to do something with strength." (woman, focus group, Putica)
- "Men are stronger; they are worth something." (girl, S/E, focus group, Tucsen)
- "Men don't do anything; they just work." (woman, focus group, Ñuñuhuayco)
- "Men study more." (girl, S/E, Santa Rosa)
- "They can find work anywhere and make more money."(girl, S/E, Luyanta)

However, one woman rejected the general preference because "men suffer; they join the army, some die" (women's focus group, Pomacocha).

Some of these same women articulated well-defined reasons for rejecting female roles:

- "Being a woman isn't good; giving birth is hard; they suffer when they have children and when a man leaves them; they have abortions with pills; they kill the child with a knife at birth or they give it away, they take poison." (girls' focus group, Putica)
- "Sometimes men hit us; we have to cook, wash, serve." (mothers' focus group)
- "Men make women suffer." (girl, S/E, Santa Rosa)

These girls and women paint a picture of the daily inequalities in their lives. Work done by men is worth more, their salaries are higher, they have easier access to the work market, and they are generally better qualified since they have studied more. Focus group discussions with girls and women in the community suggest that they do not reject being a woman but rather *being a woman who is treated in this way*. They are very aware of the hardships and injustices in the lives of women around them, and they do not wish to endure such an existence.

Despite their expressions of dissatisfaction, however, it is evident that most still believe that their femininity and the essence of their identity is connected to their relationships with

men and with maternity. A few girls and women indicated that they accept their roles as women and hold themselves in high regard, giving reasons such as the following.

- "We wear large earrings, necklaces, rings; we are pretty." (girls' focus group, Pomacocha)
- "We have a lot of work." (girl, S/E, Ñuñuhuayco)
- "It is better to be a woman, because I have learned more as a woman, how to cook, wash.... I am happy because my hands and my body are healthy." (woman, focus group, Luyanta)

Boys' Perceptions

Boys' self-perceptions were quite different from those of girls. During focus group discussions boys were asked to describe how they view their roles as males, whether they would rather be male or female, and why. These discussions revealed that boys like being who they are, and they prefer being male. It never occurs to them, it seems, to imagine being a woman. They perceive themselves as being strong and able to work. They largely define their identity in terms of how it differs from that of females. They offered the following reasons for preferring to be male.

- "[So as to] not have babies." (boys' focus group, Ñuñuhuayco)
- "We men are free, women are not; they are hit by their husbands." (boys focus group, Santa Rosa de Cochabamba)
- "Because men cheat on women."
- "We don't want to have a lot of children; we want to be engineers." (boys' focus group, Luyanta)
- "We are not like the delicate ladies that have problems." (boys' focus group, Oayarpachi)

Lack of Female Role Models

The community plays a vital role in determining the value placed on girls' education. In communities where educated women role models are not readily available, girls are less likely to understand the relationship between education and their future productivity (Bickel, et al. 1997). A variety of characteristics in a woman were admired or considered exemplary by most people interviewed in this study, including these:

- Being a professional
- Being generous (lending money; giving food to those who need it; treating farm workers well)
- Taking care of her mother
- Caring about her community; defending and negotiating for her community and for women

Other characteristics less frequently mentioned were "having a good relationship with their husbands" and at the opposite end of the spectrum "remaining single, without men, so they can go anywhere" (girls' focus groups, Santa Rosa and Luyanta).

There are very few women professionals in these communities. Few women in the selected communities have been able to complete high school, pursue a career and still live in the community. Thus, girls do not have role models of educated women with careers, or responsibilities outside of the home.

Appendix 7 Table A7.1: Tasks on the Farm by Gender for Adolescent Girls and Boys in Ayacucho

Girls	Boys	
Carry and apply fertilizer and guano	Harvest	
Select and plant seeds	Help father plow	
Weed	Plow with oxen	
Clean the farm	• Plant	
Cut alfalfa	• Protect plants from sun by tying	
Transfer vegetable sprouts	leaves	
Pick vegetables	• Dig	
• Protect plants from the sun by tying	• Water	
leaves (e.g., around heart of lettuce or	Fertilize	
head of cabbage)	Prepare lumber with ax	
	Carry lumber	
	Help lead animals	
	Hold pickaxe	
	Hold lamp	
	• Carry potatoes, olluco (a tuber),	
	barley	

Table A7.2: Domestic Tasks by Gender

Girls	Boys
• Cook	Wash
Wash; do dishes and pots	Do dishes
Keep mother company	• Just do a few things
Clean the kitchen	Help mother
Care for younger children	• Sweep
Help younger children with homework	Carry water
Clean house	
Grind	
Wash younger siblings' clothes	
Peel potatoes and peas	
• Sweep	
Prepare morón	
Bring lunch to the men on the farm	

Appendix 8 Girls' and Boys' Perceptions of Their Skills

To gain better insight into how adolescents perceived gender role differences and, specifically, how they viewed their own abilities, girls and boys were asked to list what they knew how to do.

Girls' Skills

The skills most often cited by girls were those specifically related to the domestic roles of women. Intellectual skills were the least frequently mentioned, and those who claimed to have them were young women who had completed high school (MJ Tucsen, Putica, Santa Rosa de Cochabamba, Luyanta, Qayarpachi). Farming skills included the type of farming activities traditionally assigned to women (i.e., caring for animals, planting, removing corn husks, taking cows and goats out to pasture). "Doing business," was mentioned by one girl.

Table A8.1: Skills That Girls Know How to Do

Domestic Skills	Craft Skills	Agrarian or Pastoral Skills	Intellectual Skills
 Cooking Washing Washing clothes Washing dishes Sweeping Cleaning Caring for children Helping mom Grinding food 	 Knitting and crocheting sweaters, blankets, scarves Embroidering Spinning yarn Making little skirts, napkins Weaving baskets and rope 	 Farming Caring for animals Planting Removing corn husks Taking cows or goats out to pasture 	StudyingMathematicsSpanish/languageSpeakingDoing business

The value of education for girls was most clearly articulated in the accounts of uneducated girls. The girls who had no schooling expressed feelings of very low self-esteem and indicated that they felt inferior to those who attended school and completed their education. As one girl who had not entered school stated, "Yes, she is more valuable because she studied and finished school" (EAP, S/E, Ñuñuhuayco).

Boys' Skills

When boys were asked the type of skills they had, they mainly mentioned farm-related skills, both agricultural and pastoral. The list of farming skills was far more extensive than the skills mentioned by girls and included labor-intensive tasks, such as plowing, digging, turning the earth, harvesting, and building houses. A complete list of these activities is provided in Table A8.2. Intellectual abilities occupied a less important place in their lives. No one

mentioned domestic or craft skills. One reference was made to "playing" as a skill (boys' focus group, Qayarpachi).

Table A8.2: Boys' Skills

Agrarian or Pastoral Skills	Intellectual Skills
• Planting	• Studying
• Plowing	• Writing
Digging	• Writing a letter
Turning the earth	 Doing homework
Harvesting	• Studying in school
Watching the farm	
Carrying lumber	
Tying pigs	
Holding the lamp	
Tilling	
Making lumber	
Making canals	
Planting eucalyptus	
Making adobe	
Building houses	