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Juana Mercedes Gutiérrez Valverde
Raquel Alicia Benavides-Torres
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Anexo1. - Desglose de trabajos de investigación dictaminados
Anexo 2. Desglose de trabajos dictaminados como no aprobados

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5: Efecto Cicatrizante del Cataplasma de Allium Sativum en Curación de Heridas en un Modelo Murino

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Capítulo 14: Unprotected Sexual Behaviors and Pregnancy in Mexican Girls

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Introduction

Adolescence is time when children take decisions that affect their future. It is a critical time for humans where transactions have place, develop a new identity and taking risk are common. This is a period between being child and being adult, when adolescents feel new emotions and changes that move them to have behaviors that affect their life. The adolescent population represents 10% of the population in Mexico, but its increments in numbers are very fast (INEGI [National Institute of Geographic and Informatics],

2004). According with CONAPO (National Council of Population), the adolescent population will increase from 10;572,730 in 2000 to 11;0478,79 in 2010. The national population statistics also shows that adolescents will be the biggest population by age in 2025 with a female predominance trough the years (CONAPO, 2002). Additional finding in nowadays is that girls represent more than 53% percent of adolescent population, which have more health implications in terms of reproductive health (INEGI, 2004).

One of the biggest challenges in Mexico is to reduce the rates of pregnancy in adolescents. The rate of new born in adolescent mothers from 1992 to 2002 was greater than before from 16.7 to 17.2 (INEGI, 2004). In addition, the probability of getting pregnant by generation has decreased from 20.5 in 1953's-1957's generation to 15.2 in 1986's-1992's generation, but still high if contrasting with other age groups; moreover the probability of getting pregnant before marriage is 21.5% (CONAPO, 2002). There are many factors related with these high rates of pregnancy among adolescents. There is a lack of knowledge about pregnancy prevention between adolescents. Data from Youth People Survey 1999 showed that only 32.2 percent of the adolescent's sexual active answered correct the question related to fertile period in women, and only 44% used a contraceptive method in their first intercourse. Other important finding is that 20% do not know about emergency contraception and more than 30% of the girls will not have a baby after getting pregnant (Mexfam, 1999; Diaz, Harfy, Alvarado, & Ezcurra, 2003). In addition, the knowledge at least one contraceptive method had an increment in 1976-1997 from 79.8 % to 93.4% (CONAPO, 2002). However these findings, there are two negative

aspect related, first this increment is the lowest in relationship with other age groups; and second the unsatisfied demand of Family Planning is bigger when comparing with other groups of age (33.8% in 1987 and 26.7% in 1997). The age of first intercourse in girls is 0.1% for 13 years and 21.1% for 19 years. Adolescents who do not go to school (29.6%) showed bigger percentage than those who are studying (3.2% vs. 25%).

Reproductive health in adolescents is very complex, but knowing the debilities may help to fortify some important aspect for a healthy adolescent population. Adolescent populations face health problems related to first sexual intercourse (reproductive or sexual health focus), HIV/AIDS, and unwanted pregnancies (Maldonado, Morello, & Infante-Espinola, 2003). Therefore, it is very important to prevent those mentioned problems. The comprehension about gender perspectives and its influence in the development of cultural preventive strategies may impact in the behavioral change. The sense of invulnerability, the necessity of freedom to explore their capabilities and knowing new horizons provide them with a permissive environment that society had created. This environment engaged them in risky behaviors that may create circumstances for unwanted pregnancies (Salgado, 2003). Adolescent's sexual health has a significant impact on social, economic, and political progress in Mexico; but unfortunately governmental institutions do not meet the real need that adolescents have. One explanation is that adolescents have lower rates of mobility and mortality in comparison with other groups of age, so there is a belief that they are healthy. People in the health system do not consider that youths are affected by problems related to sexual health like

pregnancies or behaviors that may have future consequences in terms of morbidity (Madaleno, Morello, & Infante-Espinoza, 2003).

Pregnancies among adolescents are a public health problem that should be address in the best way in order to find a solution. There is evidence that shows adolescent pregnancy as a big problem. Stern (1997) mentioned four elements that define adolescent pregnancies as a big problem: 1) the supposed increment, 2) the contribution to population growth, 3) the negative effects on mother's and child's health, and 4) the contribution to the poverty levels. First, as mentioned above the number of pregnant adolescents is very high, but it does not present a big increment if talking in statistic numbers. This is a big problem that has never been solving, because most of the statistics showed incomplete evidence. These statistics showed the number of new born in the 13-19 age groups, but what about pregnancies that finishes in abortion. Second, in terms of population growth, there is obvious that early pregnancies in youths tend to have more children with less separation between them, which elevate the fecundity and population growth. In other words, if pregnancies among adolescents are in disproportional manner, that may be very negative for the society development. Third, the negative effects in women's and child's health are tremendous. Problems related with malnutrition, heath, and poor mother attention; are crucial for healthy pregnancies. Adolescents body and brain are not been developed at all, so biological implications and problems in decision making may have place. For example, when having a problem about whether eat or not eat appropriate for the well being of her and the child, they could just ignore

the consequences. Finally, pregnancy in adolescents has a relationship with the levels of poverty. Is more often that a younger mother will not finish school, so employment possibilities are very few. In addition the benefits of having a stable job are less probable, like health care access and insurance for the mother and the child.

Pregnancy among adolescents is a big problem that affects not only women and child, but also society. There are several gaps related with the reality of pregnancy in Mexico. Some are related with the demographic factors and some other with sociopolitical issues. However, health professional have been trying to solve this problem the available studies are at descriptive level. Therefore, in order to provide more accurate explanation to this phenomenon, it is very important to know the factors that prevent or not prevent pregnancies in order to develop more efficient health policies and programs to help them. Is well known that girl's decision about whether or not engage in unsafe sexual practices may be influenced by a variety of factors. In this analysis personal, familiar, socio-cultural, and institutional factors have been identified in Mexican adolescents. Therefore, this paper aims to identify the factors that influenced the decision of Mexican pregnant adolescent about to engage in unprotected sexual behaviors. This paper presents factors at different levels that affect adolescent pregnancy in Mexico.

Personal Factors

At the most basic level personal factors interact with each other, and operate in a complex social context that involves individuals, community, and society as a whole (Rusbult, 1997). There are factors that are being

identifying as influence for pregnancy among adolescents, such as, age, education, socioeconomic status, urban or rural residence, number of children, knowledge, attitudes, and sexual experiences. Most of the studies that considered age on their analysis include adolescents between 13-19 years old. Contradictory as the belief, pregnancies among older adolescents (16-19) are not very risky if talking in biological terms. If a pregnant adolescent between these years has adequate conditions (nutrition, health, prenatal check up, familiar, and social support), pregnancy is not a risk for child or mother. Only at 14 years old or less pregnancy represent risk for health and it is good to know that frequency among younger adolescents is not very common (Sterm, 1997). Unwanted pregnancies are more common among adolescents between 18 to 19 years old (63.9%). However age is not considered as a risk, most of the adolescents do not have all good condition for healthy pregnancies (Nunez-Urquiza, et al., 2003). Another important factor to be considered is education. Adolescents that are not enrolled at school seem to have more sexual activity than those who go to school. The average of sexual active girls is 3.2% for those who assist to school and 25% for those adolescents who do not assist (Population Council, MEXFAM & Fronteras, 1999). Nunez-Urquiza et al. (2003), reported that 51.4% of pregnant adolescent finished elementary school and the rest (48.6%) studied high school or more. However most of the adolescent do not consider to break their scholar plans (64%), most of the pregnant adolescent do not continue with their studies and plans after the child born, which may affect on the other variables like, occupation; health care access; socioeconomic status; and knowledge (Ahedo, Rodriguez, & corona, 1999).

Socioeconomic status and place of residence have been studied in pregnant adolescents. Different as the belief about more adolescent pregnant in lower socioeconomic status, most of the pregnancies in these age occurred in the middle socioeconomic status. Only 29.6% of the pregnancies occurred in low socioeconomic status while 68.2% of pregnancies are among middle class. In addition to this finding, other important information is related to the place of residence (Nunez-Urquiza, 2003). In the past pregnancies were less common in rural areas, but in nowadays these percentages have been changing (Stern, 1997). However most of the pregnancies still occur in urban (52.7%), the increment on pregnancies in rural areas is almost 20% from 1987 to 2000 years. As mentioned before these factors are strongly related and those adolescent in rural areas are more likely to have less education, moreover the socioeconomic status in the postpartum is lower because all expenses related with the new baby and the possibility of having a stable job with lower education is almost impossible. Other important factor that may be related with their lack of knowledge about pregnancy prevention is the number of children that adolescents have, and their socioeconomic consequences. On the reproductive history piece, 68.2% was a first born, but 31.8% of adolescents were pregnant for second or third time. From those adolescents that have more than one child, more than 90% did not have the necessary time for body recuperation between pregnancies (Nunez-Urquiza, 2003).

All these personal factors mentioned above have a strong relation with some other factors like knowledge, attitudes, and past sexual experience. Therefore, it is very important to make connections between them. High rates (80.9%) of adolescents know about pregnancy

prevention, but only 44% of adolescents used a contraceptive method in their first intercourse. However adolescents have the knowledge, they seem not to use it for pregnancy prevention (Population council et al., 1999). One explanation may be their attitudes of invulnerability, these feeling make them to engage in activities that are risky and may me conclude as an unwanted pregnancy (Martinez, 2003; Diaz, Hardy, Alvarado et al., 2003). It is evident that family planning is not an important piece in Mexican adolescents, four of 10 pregnant girls mentioned that they did not planned their first pregnancy. Adolescent attitudes about pregnancy are varies, 55.6% think that they should get married, 44.2% considered they must have the baby, 19.3% thought about abortion, and 11.5% opined that giving the baby in adoption is the best option (Population Council, 1999). In the case of sexual experiences, most of the sexual active female's adolescents had heterosexual experiences. Sexual experience increased with age, and more positive attitudes about sexuality, and greater knowledge about STD's and pregnancy prevention. In addition history of sexual abuse has been related with early initiation of sexual activity in underserved populations in Mexico (Huerta-Franco, 1999). Sexual experiences, knowledge, and attitudes have association with some family factors, so to consider these following factors may help to understand the phenomenon more precise.

Familiar Factors

Adolescent's families play a very important role in the sexual development and the promotion of sexual activities regarding pregnancy prevention. Family has a significant influence as role models and the provision of

opportunities to promote health (Millstein, Peterson, & Nightingale, 1993; Kingon & Sullivan, 2001). Therefore this paper shows four family factors that have important impact and relationship with personal and socio-cultural factors on pregnancies in Mexico; such as unsatisfactory interpersonal relations with family, parent-child communication, family functioning and structure, and parental attitudes toward sex. Mexicans believe is that family is a close group and the main unit of society. In most families, the authority figure and provider is the father, while the mother is responsible for the home. In nowadays, families in Mexico have variations and diversity in structure. The differences are related with their type of family relation with their tutor and other member at home (Secretaria de Salud, 2002).

Communication about sex is fundamental in adolescence because it permits that they obtain orientation and clarification of their doubts. There is evidence that supports beneficial effects of parent-child communication because through communication, parents transmits values; knowledge; and education. Parent-child communication postpone sexual activity and make adolescents less likely to engage in sexual risk for pregnancies and HIV prevention; such as fewer sexual partners, use of contraceptives, condoms, and other methods (Pick, 1995). However, most of the families do not talk with adolescents about sexual issues and the importance of preventing pregnancies (INEGI, 2000; Instituto Mexicano de la Juventud, 2000). In addition to communication, attitudes have a great impact in whether communication or not have place. The influence of parents, older family members is particularly strong among adolescents. Evidence proved that greater communication may have a positive impact

if parents' attitudes about sexual intercourse are more liberals and they accept their adolescent sexual activity (Kirby, 1998). Many adolescents have difficulties in communicating with parents because parental attitudes toward use of contraceptives.

Parents do not want that children engage in sexual behaviors, so adolescents fear the parent reactions to their sexual activity. A qualitative study by Diaz et al., (2003) found that parents believed that having sex is unmoral, but in other hand parents do not want to talk about contraception because they think that it will promote sexual activity. In addition, there is incongruence between parents and mother concerning communication levels with their children, mother believe that they have a higher level of communication. In father's case, they perceive less communication with their children's than what children really perceive, but girls have more difficulties in communication about sex with their fathers than mothers (Pick, 1995). Considering all information above, sexual expression is much closed related with socio-cultural factors, in particular what is consider proper and the influence of attitudes on the transmission of prescribed cultural norms. Cultural inhibitions and puritanical attitudes present an important barrier between parents and adolescents, all these factors still affect Mexican families because there is a predominance of conservative values.

Socio-cultural Factors

As mentioned above socio-cultural factors affect personal and familiar factors because Mexican society is very strong and rigid; and many attitudes and believes are product of what culture and norms determine. Cultural characteristics identify individual as member of

a community with different traditions, religions, and beliefs (Pajewski & Enriquez, 1996; Rizo, 2000). In this part gender, sex as a taboo, and religion were recognized as important factors in whether or not to engage in unprotected sex in pregnant adolescents. In terms of gender Mexico is one of the countries more characterized with a patriarchal society characterized by machismo. Machismo (chauvinism) is a male quality, meaning to be strong, in control and to be the provider for the family. The expectation of macho (Chauvin) can disempower both men and women, because, sex is seen as an opportunity for men to prove their masculinity. Women are described as submissive and less powerful than men. Women do not talk about their feelings related to sex, so negotiating pregnancy prevention is difficult because sex is a taboo in Mexican society (Castro-Vazquez, 2000).

Virginity seems to be an indispensable condition for women to marry, and this belief is supported by religion. Therefore it is very important to mention that 92% of Mexican population is Catholic, which affects in many other instances for contraceptive use. Therefore, girls' oppression is highly marked, in one side machos and family are very authoritarian; and in other side religion norms are very important for society. In a study about reproductive rights in Mexican women reported that sexual activity was alien to females, in close relation with reproduction, and obeying the Catholic doctrine of marriage. "In a heavily male-dominated society, where the Catholic Church retains a strong influence over policy, a woman's most basic rights must be endlessly negotiated, even in cases of risk to her life or health" (Ortiz et al., 1998, p. 164). In Mexican society men believe that girls are responsible for persuading men to

use a condom, which reinforce the idea that is woman are primary responsible for having safer sex and their consequences of not doing it like pregnancy (Castro-Vazquez, 2000). In other hand, girls perceive that carrying or buying condoms is not appropriate for them, and men believe that girls who bring condoms are slut. These entire situations disempowered adolescents, making them to seem as ignorant about contraceptive use, but in reality they do not do it because they fears about what society had imposed. In addition, cultural subordination to their sexual partners results in a condition that make complicated to handle pregnancy prevention. These socio-cultural factors show how woman is disempowered by men and religion believes related with Mexican culture that show that gender matters (Tolman, 2003).

Institutional Factors

Governmental and non-governmental institutions in Mexico are working hard in order to give sexual health services that meet adolescents' needs. In the country there are 240 friendly units for adolescent attention that have a multidisciplinary team. The Mexican program for health services aims to mobilize families and communities around the country in order to involve every body active in adolescents' health promotion. People that create that program believe that community and family may help to fortify the resilience among youths; and they will make a compromise with the Mexican growth demands. The Mexican health services provide immunization and nutrition; in other words they just give general health services (Santos, 2003). If adolescents have doubts relates with reproductive

health, adolescents have to require the sexual orientation, which is very paradoxical because it is rare that they recur to health services when they need orientation (Rasmusen Cruz, Hidalgo San Martin, Nuño Gutierrez, Villaseñor Farias, & Sahún Mora, 2001). As mentioned because society norms, they have fears and problem with communication with adults, even more if they do not feel comfortable. The SSA is the secretary of health in Mexico and they developed an action program for health care access specific for adolescents. This program is focused on risk factors and protective factors of adolescent's health, and allow health care providers to include social, psychological, biological, and familiar factors in order to have impact on self-care, well being and quality of health in adolescents (SSA, 2003). There are some principles that fundament this program such as, community enrolment (parents and teachers); respect of human rights; access to health care information; and promotion and guidelines of self-determination in adolescent health. This program implemented four conditions for maintaining sexual and reproductive health: to increase the age of first pregnancy, to amplify the space between born and born, to adopt family planning methods, and to provide satisfactory prenatal and postpartum attention for adolescents (SSA, 2003). Looking in those conditions, government is doing efforts for prevention and promotion of healthy pregnancies among adolescents. However this program may help a lot, there are few governmental institutions that follow the program as created.

There are some other non governmental institutions that have been working in pro of sexual health in adolescents. Mexfam is the Mexican Planning

Association, a nonprofit civil organization governed by volunteers that specializes in diffusing the practice of voluntary fertility regulation among the needy sectors of the Mexican population. Mexfam mission is “to provide quality and state-of-the-art services in family planning, health, and sexual education; especially to the vulnerable populations in Mexico: the young and the poor” in urban and rural areas (Mexfam, 2004). During 2001, Mexfam operated a total of 135 programs distributed in 28 states in Mexico. Fifty six of these programs were dedicated to serving young people, focusing on adolescent’s sexual health, developing three main activities: 1) providing information and education to in-school youth and teachers training; 2) organization of activities out of youth schools; and 3) offering adolescent friendly sexual health services. Their contribution to the problem of pregnancies was to distribute contraceptive methods to 364,360 couples in Mexico. This is a greater advance, but if considering that there are more that 22 million of adolescents in the country, proportion that do not receive this type of service was very high and only a small proportion report to use contraceptives. In other words, there are more factors to considering for adolescent decision about whether or not to engage in sex with out protection.

Gente Joven (Youth people) is another non governmental program for youths, which is specialized in education and counseling about healthy life styles and life planning. Gente Joven provides information about sexual development, myths and facts about sexuality, and health sexual values (responsibility, communication, and assertiveness). The education model designed was based on a gender perspective, where promotion of equality between men and woman. This organization

developed materials and workshops for adolescents, health professionals, parents, teachers, and community; the topics are: body changes in adolescents, family communication, sexuality and adolescence, STDs and HIV prevention, early pregnancy and contraception, gender and adolescence, and gender violence. One strong aspect of this program is the facilitators are youth 24 years old younger, that support adolescents and understand their situation more exact. People working on this program are from community and they are friendly trained volunteers. In addition this organization do a survey every year with questions that are more specific to adolescent health problem and more specific about sexuality. This survey is very detailed and their results are available for others to use in order to promote research in favor of adolescent sexual health.

Model for unprotected sexual behaviors in Mexican girls

Because pregnancy adolescents is influenced by different factors as mentioned above. The present paper proposed a model for unprotected sexual behaviors in Mexican girls, which may explain how these factors interact at different levels and how complex the pregnancy prevention phenomenon is in their context.



As the model shows, adolescent girls' factors are influenced by familiar, socio-cultural and institutional factors. The interaction of them in girls' environment may influence on their decision about whether or not to engage in unprotected sex that put them at risk for unwanted pregnancies. The creation of this model was based on the literature review presented along the paper. The use of this model may help for creation of prevention programs in Mexican population. In addition, this model can be used in order to create and change policies for adolescent's sexual health. Therefore, the following paragraphs talk about policies and policies recommendations.

Policies and recommendations

Policies are very important in order to solve problems in society, and health policies are created in order to increase populations well being. Therefore it is very important to describe the specific problem when analyzing policies. The problem that this paper talks about is adolescent pregnancy and their related factors. The real problem behind adolescent pregnancy is the early sexual initiation and unprotected intercourses. Evidence is the big rates of unplanned adolescent's pregnancies. In addition, mother death occurs in one third of the cases which means that they are in the most precarious situations like poor nutrition and health problems when they get pregnant. In Mexico "Secretaria de Salud" (Secretary of health) developed policies in order to increase adolescent health. The most

remarkable situation is that most of the policies are related to adolescent health but not in specific for solving the problem of adolescent pregnancies (SSA, 2003). The policies are the followings:

- Increase quality of health services in 10-19 age groups.
- To develop human and technical personal that work with adolescents.
- To give holistic attention to adolescents that goes to medical units.
- Take actions before the problem through two main focus: prevention and decrement of risk factors, and promotion of protective factors.
- Promotion of activities that produce reduction on inequity.
- To encourage adolescent's self determination
- To extend the coverage of preventive health services at institutional and governmental sectors.

This paper make three recommendations for policy modification and adaptation based on adolescent girls health care by this governmental institution (SSA), in order to decrease considerably adolescent pregnancies in Mexico. The main principle for proposing these modifications is Empowerment for adolescent sexual health promotion. The world health organization defined empowerment as "the process of enabling people to increase control over, and to improve their health" (World Health Organization, 1986). In this case, empower is described as the process where government and institutions participate enough to have a positive

impact in adolescent pregnancy prevention through control and influence in adolescent and community lives. Rissell (1994) mentioned that there are two different dynamics of empowerment, individual and community empowerment. Individual empowerment includes personal competence, desire for, and sharing control; in other words a feeling of greater control over their own lives. In other hand, community empower includes a political action component with participation on the distribution of resources. Therefore, if adolescent communities have more motivation from governmental and institutional organizations they may work in order to redistribute their own resources. Based on this assumption three policy modification or adaptation from the list mentioned above have place.

The first policy recommendation would be: *take actions before the problem through two main focuses: prevention and decrement of risk factors, and promotion of protective factors*. Considering the adolescent pregnancy problem, contemplations of risk factors mentioned on the model and literature review could be lack of knowledge related to contraceptive use, negative attitudes toward sex, early intercourse, multiple partners, unsatisfactory family relations, poor parent child communication about sex, protect negotiation, and religion norms. The recognition of these risk factors when creating programs to promote adolescents is very important in order to endorse protective factors. Governmental institutions may empower community and families to help girls with recourses and enrollment in activities that promote sexual health in this population group. Empowering society and community may have a greater impact than doing this to a personal level as the model showed. Prior activities it is very

important to understand and knowing adolescent community in order to start a program that involves community, families, and girls. The second policy is *promotion of activities that produce reduction on inequity*. As mentioned in the socio-cultural factors, gender matters in Mexican society; but to change this way of thinking will take long time. Women are described as submissive and less power than men. Empower girls and giving them the opportunity to talk about their feelings related to sex and negotiating sexual protection in a relationship is essential. Involving families in this are may help to change this perspective. Parents can empower their adolescents and transmit acceptance of gender roles as protective behavior. Promotion of communication about sex and positive attitudes in family environment will transmit the sense of talking about their desires with partners. Therefore institutions and government may create programs involving families knowing their desires and doubts about the quantity of information is a big deal. Parents may want to talk with children, but they do not feel comfortable with discussions. Creating a helpful atmosphere for communication between parents and girls and empowering actions that may be helpful to reduce pregnancies among adolescents. The third policy is *to give holistic attention to adolescents that goes to medical units*. It is very important to extend pregnancy prevention in all areas, but considering religions norms and values is another place that have to be cover by governmental and institutional programs. Taking in consideration that more than 90% of Mexicans are Catholics, options available for contraception may include natural methods because more of medical units offer the condom as primary method for pregnancy prevention. In addition, data reported on the literature

review showed that girls know about use of condoms and pills; but they do not use them. Therefore, the natural method may be promoted with the emphasis that it does not protect sexual transmitted diseases; but if used correct may help to prevent unwanted pregnancies. Promotion in this area it is very important and gives more options to adolescents that have strong values and beliefs about religious norms. The contribution that this paper proposed is to make adaptations and modifications to general policies that were created, which gives more power in policies changes at governmental and institutional level.

Conclusions

Health problems related to pregnancy in adolescents are more severe if risky factors disempowered adolescent girls. Related factors are: personal, familiar, socio-cultural, and institutional; and they affect whether or not girls engage in unprotected sex while they are adolescents. All these factors interact and make adolescent pregnancy problem more complex. There is a big necessity that government and institutions work in pro to solve this problem before it goes worse. Society is changing very fast and interaction between these factors may have worse consequences in future such as persistent poverty and lees opportunity for women development. In addition, it is very important to highlight on the equality of access to health care for girls, because a framework based on adolescent girls' health may give them power to control them self and make more conscious decisions related to unprotected sex. This paper proposed a model centered on adolescent health factors that contribute to understand pregnancy phenomenon in Mexican adolescents. These

factors should be considered for policy makers in order to provide sexual and reproductive health promotion on adolescents. Another important issue to consider is the less power that girls have in society and how programs and policies may assist to give them more equality on health care services created for adolescent girls.

Gaps on literature are related with the issue that girls know about contraceptive, but they do not use them. One explanation to this could be factors related with religion and society norms, therefore more research is recommended on those aspects. Understanding cultural values related to sexuality before marriage in a society which changes in fecundity, marital status, and women roles that women face in nowadays is valuable. These situations give more options to girls between the sexual maturation and family roles, where a reinforcement of youths preparation for inconvenient and unwanted pregnancies. Therefore, there is another research question to reflect for future research. Are many of the problems that conduce to unwanted pregnancies in adolescents a consequence of how society values premarital sex and sexuality among adolescents? Including socio-cultural factors in research among adolescents is needed in order to understand this complex phenomenon. Adolescents are the future of Mexico and they are growing very fast, if they are healthy, society will be healthy; this is a proclamation to governmental and institutional organization to work in favor of sexual health promotion in adolescent population.

References

- Ahedo Parreti, G., Rodriguez Mena, L., & Corona Ramirez, F. (1999). Las bajas expectativas de vida en la adolescente. *Archivos de Invesitgaion Pediatrica de Mexico*, 2(5), 4-9.
- Castro-Vazquez, G. (2000). Masculinity and condom use among Mexican tennagers: the escuela nacional preparatoria No. 1's case. *Gender and Education*, 12(4), 479-492.
- Diaz, S., Harfy, E., Alvarado, G., & Ezcurra, E. (2003). Acceptability of emergency contraception in Brazil, Chile, Mexico. *Cad. Saude Publica, Rio de Janeiro*, 19(6), 1729-1737.
- Huerta-Franco, R. (1999). Factors associated with the sexual experiences of underprivileged Mexican Adolescents. Retrieved from http://www.findarticles.com/p/articles/mi_m2248/is_134_34/ai_55884923/print.
- Kington, Y.S., & O'Sullivan, A. L. (2001). The family as a protective asset in adolescent development. *Journal of Holistic Nursing*, 19, 102-121.
- Maldonado, M., Morello, P., & Infante-Espinola, F. (2003). Salud y desarrollo de adolescentes y jóvenes en Latinoamérica y el caribe: desafios para la proxima decada. *Salud Publica de Mexico*, 45(s1), s132-s139.
- Marinez Salgado, H. (2003). Salud de adolescentes. *Salud Publica de Mexico*, 45(s1), 1-3.
- Millstein, S. G. (1993). A view of health from the adolescent's perspective. In S.G. Millstein, A. C. Petersen, & E. O. Nightingale (Eds.), *Promoting the*

health of adolescents, (pp 97-118). Oxford: Oxford University Press

Mexfam. (1999). Encuesta Gente Joven. Retrieved from

Nunez-Urquiza, R. A., Hernandez-Prado, B., Garcia-Barrios, C., Gonzalez, D., & Walter, D. (2001). Embarazo no deseado en adolescentes y utilización de metodos anticonceptivos posparto. *Salud Publica de Mexico*, 45,(s1), s92-s102.

Pick, S. (1995). Impact of the family on the sex lives of adolescents. Retrieved from http://www.findarticles.com.p/articles/mi_m2248/is_n119_v30/ai_17387233/print.

Rasmusen Cruz, B., Hidalgo San Martin, A., Nuño Gutierrez, B., Villaseñor Farias, M., & Sahún Mora, I. (2001). Indentifying young people's guidance needs through telephone counseling. *Adolescence*, 36(141), 21-32.

Rusbult, C. (1997). Integrated scientific method. Doctoral dissertation, University of Wisconsin-Madison, EE.UU.

Santos-Preciado, J. H. (2003). La salud de adolescents: cambio de paradigma de un enfoque de danos a la salud al estilo de vida sana. *Salus Publica de Mexico*, 45(s1), s5-s7.

Santos-Preciado, J. H., Villa-Barragan, J. P., Garcia-Aviles, M. A., Leon-Alvarez, G., Quezada-Bolanos, S., & Tapia-Conyer, R. (2003). La transición epidemiologica de las y los adolescentes en Mexico. *Salud Publica de Mexico*, 45(s1), s140-s147.

Secretaria de Salud (2002). Programa de Atención a la Salud de la Adolescencia. Secretaria de Salud (1st. Ed.), Cd Mexico: Mexico.

Stern, C. (1997). El embarazo en la adolescencia como problema publico: una vision critica. *Salud publica de Mexico*, 39(2).

Tolman, D. (2003). Gender matters: Constructing a model of adolescent sexual health. *Journal of Sex Research*, 40(1), 4-10.