DOI: 10.9789/2175-5361.2016.v8i1.3597-3608

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Knowledge, attitudes and ...



## RESEARCH

#### Conhecimentos, atitudes e práticas sobre contracepção para adolescentes

Knowledge, attitudes and practices on contraception for teens

Conocimientos, actitudes y prácticas de anticonceptivos para adolescentes

Gilka Paiva Oliveira Costa<sup>1</sup>, Adriana Queiroga Sarmento Guerra<sup>2</sup>, Ana Cristina Pinheiro Fernandes de Araújo<sup>3</sup>

#### ABSTRACT

**Objective:** to Investigate the communication, knowledge, attitudes and sexual behavior of adolescents. **Method:** this is an exploratory study and was conducted with students from the 7th to the 9th grade. Variables were: communication, attitudes, knowledge about contraception, sex, age, and sexual behavior. Analyses were performed by frequency, chi-square test, Student t and logistic regression. **Results:** of the 570 participants, most had 14-16 years and had little knowledge and unfavorable or ambivalent attitudes. Only 65% talked about contraception and 21.4% were sexually initiated. Among these, 49.3% had never used contraceptive methods (CM). There was no significant difference in the use of CMs between those who talked about contraception or not (p = 0.201). **Conclusion:** the results have presented a majority of sexually active adolescents under 15 years with knowledge and unfavorable attitudes to contraception and never used any CM. This study warns that communication about contraception should be encouraged before sexual initiation. **Descriptors:** Sexual behavior, Teenager, Attitudes, Contraception, Teenage pregnancy.

#### RESUMO

**Objetivo:** investigar comunicação, **Connecimentos**, attrauces e comportamento sexual dos adolescentes. **Método:** estudo exploratório conduzido com estudantes do 7º ao 9º ano de escolaridade. Foram variáveis: comunicação, atitudes, conhecimentos sobre contracepção, sexo, idade e comportamento sexual. As análises foram realizadas pela frequência, testes de qui-quadrado, t de student e regressão logística. **Resultados:** dos 570 participantes, a maioria tinha de 14 a 16 anos e apresentaram pouco conhecimento e atitudes desfavoráveis ou ambivalentes. Apenas 65% conversaram sobre contracepção e 21,4% eram iniciados sexualmente. Entre esses, 49,3% nunca usaram métodos contraceptivos (MC). Não houve diferença significativa no uso de MCs entre os que conversaram ou não sobre contracepção (p= 0.201). **Conclusão:** os resultados apresentaram uma maioria de adolescentes sexualmente ativos com menos de 15 anos, com conhecimento e atitudes desfavoráveis à contracepção e que nunca usou qualquer MC. Este estudo alerta que a comunicação sobre contracepção deve ser incentivada antes da iniciação sexual. **Descritores:** Comportamento sexual, Adolescente, Atitudes, Contracepção, Gravidez na adolescência.

#### RESUMEN

**Objetivo:** investigar la comunicación, et conocimiento, tas actitudes y el comportamiento sexual de los adolescentes. **Método:** Se trata de un estudio exploratorio. Se llevó a cabo con estudiantes de 7mo a 9no grado. Las variables fueron: la comunicación, las actitudes, los conocimientos sobre los métodos anticonceptivos, el sexo, la edad y el comportamiento sexual. Los análisis se realizaron por frecuencia, prueba de chi-cuadrado, t de Student y regresión logística. **Resultados:** De los 570 participantes, la mayoría tenía 14-16 años y tenía poco conocimiento y las actitudes desfavorables o ambivalentes. Sólo el 65% habló de la anticoncepción y el 21,4% se iniciaron sexualmente. Entre éstos, el 49,3% nunca había usado Métodos anticoncepción o no (p = 0,201). **Conclusión:** los resultados mostraron la mayoría de los adolescentes sexualmente activas menores de 15 años que tiene conocimientos y actitudes desfavorables a la anticoncepción y nunca utilizado cualquier MC. Este estudio advierte que la comunicación acerca de la anticoncepción debe alentarse antes de la iniciación sexual. **Descriptores:** Comportamiento sexual, Adolescente, Actitudes, Anticoncepción, El embarazo adolescente.

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DOI: 10.9789/2175-5361.2016.v8i1.3597-3608

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### INTRODUCTION

n recent decades the society has experienced great changes in social norms, especially when it relates to sexuality. Over the post-marketing years of hormonal contraceptives, dating from the 60s, the paradigms for sex have expanded beyond reproduction.<sup>1</sup> The social permissiveness for playful sex, premarital sex, sexual initiation increasingly early<sup>2</sup> are accompanied by a sexual behavior without adequate preventive care, from which its effects on sexual and reproductive health are even more serious when it comes to teens.

Teenage pregnancy is considered one of the main vulnerability factors that can seriously affect adolescent development. It holds a direct cause and effect of poverty and poor education, which are other important vulnerabilities that impose limits on the opportunities that teenagers have and will have throughout their life.<sup>3,4</sup>

On the other side of this reality are the various methods of contraception (MCs) and the training of adolescents for their use, which requires a comprehensive sexual orientation that recognizes the teenager as an active subject and protagonist of their care and prevention, whether to use contraception or delaying sexual initiation.<sup>5</sup> However, despite all the reform in social standards, won sexual freedom has failed to achieve the space of communication. Talking about sex and everything that relates to this is still a taboo and thus matters are not discussed with ease.<sup>6</sup> This condition hinders a proper sexual orientation and prevents an assertive dialogue and encouraging the use of preventive methods.

However, there is a wide network of contacts with whom adolescents consult when they wish to clarify their questions related to sex. These communication links represent key points to consider in sexual health promotion policy aimed at the youth.<sup>7</sup>

Given the importance of sexual orientation in adolescent health and recognizing the use of contraceptive methods as the main ally in the prevention of the personal and social impact of unplanned pregnancy. This study intends to work with adolescents in social conditions of greater vulnerability to pregnancy (from low income and low education families) in order to identify how teenagers have been communicating about contraception; check their knowledge and attitudes on the subject; and to assess the adolescent sexual behavior in the context of sexual initiation and use of contraceptive methods (CMs).

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## **METHOD**

This is an exploratory study with cross-sectional design, conducted from March to May 2011 in the city of João Pessoa, Paraíba State, northeastern Brazil.

A non-probability convenience sample was used formed to fulfill the purposes of the study. The inclusion criteria for selecting the school: to be public; have adolescents enrolled in the 7th to 9th grades of elementary school. The teens selection criteria were: be enrolled in the selected schools, have age between 11 and 19 years and having done between 7 and 9 years of study.

Data were collected in the classroom, in the time corresponding to a class (50 minutes) without the teacher in the classroom, using AutoFill material composed of three steps. The first stage was carried out through questionnaires covering sociodemographic characteristics, sexual and contraceptive practices; the second stage was represented by a closed question asking whether the teenager knows or not a contraceptive method and another open question requesting the quotation of contraceptive methods known by the student. The third step was performed using a Likert scale consisting of 14 items related to attitudes about contraception and were validated with alpha index by Cronbach 0.700.

The database was built using the Epi Info software, version 3.5.1 (2008), with double entry by different professionals. Statistical analysis was performed using STATA 10 software. For data analysis were considered as dependent variables: the existence of communication about contraception and social contacts with whom the teenager spoke on the topic; knowledge; attitudes; and contraceptive use (CMs). Independent variables were: gender, age and sexual initiation. For the age variable, the analysis was performed from the categorization made in two groups according to the period of adolescence, which comprise the initial phase (10-14 years) and late phase (14-19 years). For sexual initiation variable analyzes were performed considering adolescents with and without sexual initiation. To attitudes was considered favorable attitude compliance with items that point positive aspects of CMs or disagreement with items that link negative aspects of contraception.

Univariate analyzes were performed for calculation of frequency and the difference between groups and was performed using chi-square tests, student t considering statistically significant p <5%. Multivariate analysis was performed by logistic regression for categorical variables with significance level of up to 0.20 in the bivariate analysis.

The project was approved by the Research Ethics Committee of the University Hospital Lauro Wanderley the Federal University of Paraíba under number 328/09. The confidentiality of responses was assured by anonymous self-administered questionnaires. To guarantee the right to refuse the voluntary participants and their guardians, the free and informed consent form was previously sent with the interview. In the classroom, all ethical aspects were repeated, giving the right of non-participation, or completion of interruption at any time.

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## **RESULTS AND DISCUSSION**

#### **Characteristics of participants**

Of the four selected schools, 570 students participated in the study. Males are 54.7% (n = 312) and females 45.3% (n = 258). The age varied from 11 to 19 years (mean = 13.9, standard deviation = 1.6 years). The majority (68.8%, n = 392) was at least 14 years old and the average education was 7.9 years of education (SD = 0.8 years). Sexual behavior

The sample distribution according to sexual initiation in relation to sex, age and educational level of the participants is presented in Table 1. Sexual initiation was declared by 21.4% of respondents (n = 120). Most were male (73.3%, n = 88, p = 0.001) aged up to 15 years (60.8%, n = 73, p = 0.001).

A percentage of 49.3% (n = 59) of sexually active adolescents, never used any contraceptive method and 45% (n = 54) stated having used the condom. Among adolescents who reported using a condom, most were male (77.8%, n = 42). The other adolescents reported using hormonal contraception (3.3%, n = 4), or the combination of condoms and hormonal contraception (2.4%, n = 3).

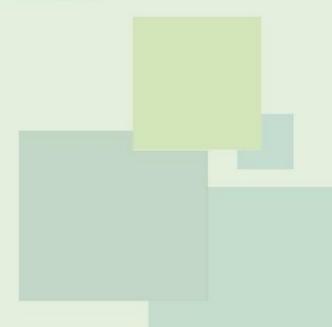


Table 1. Profile of the sample and its distribution according to thecommunication on contraception and sexual experience.João Pessoa, PB, 2011

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	Total n = 570	They tall MAC n = 568 *	ked about	Sexual ini n = 561 †	tiation	- p
		No	Yes	No	Yes	- P
Predictors	n (%)	196	372	441	120	
		(34.5)	(65.5)	(78.6)	(21.4)	
Sex						
Mala	312	114	197	218		
Male	(54.7)	(36.7)	(63.3)	(71.2)	88 (28.8)	0.001
Female	258	92 (24 0)	175	223	32 (12.5)	0.001
remate	(45.3)	82 (31.9)	(68.1)	(87.5)	52 (12.5)	
Age						
11 to 14 years	392	145 (37)	247 (63)	344	42 (10.9)	0.001
	(68.8)			(89.1)		
15 to 19 years	178 (31.2)	51 ( <mark>2</mark> 9)	125 (71)	97 (55.4)	78 (44.6)	0.001
Years of study						
7 <sup>th</sup>	212 (37.2)	90 (42.9)	120 (57.1)	168 (82)	37 (18)	
8 <sup>th</sup>	209 (36.7)	57 (28.9)	140 (71.1)	158 (81)	37 (19)	12:53
9 <sup>th</sup>	149 (26.1)	49 (30.4)	112 (69.6)	115 (71.4)	46 (28.6)	

\* No answer = 2 (0.4%)

† No response = 9 (1.6%)

p - Level of significance of the chi-square test and Student's

#### Communication on contraception

Talk about contraception never existed for 34.5% (n = 196) of the adolescents. The distribution of the existence of communication about contraception according to the characteristics of the participants are presented in Table 1.

The communication evaluated according to the sexual experience (Table 2) shows that the talk about contraception is significantly higher among teenagers who have started their sexual practices (p = 0.009).

Regarding gender and age of the participants, the conversation about contraception had no statistically significant difference with p = 0.23 and p = 0.06 respectively. Also in the multivariate analysis, the association of sex, age and sexual initiation with the talk about

contraception it appears that there is only significant association of communication with sexual experience (OR = 0.59, 95% CI = 00.36 to 0.96).

Table 2 shows the use of CMs according to the communication about contraception and you can see that there is no significant difference in the use of CMs among adolescents who talked or not about contraception (p = 0.201).

Regardless of the stage of adolescence, parents and friends are the main social contacts appointed by adolescents as contraception chat sources. In the case of a non-exclusionary variable, the displayed values resulting from the use of more than one source of communication by some respondents and correspond to the parents (54.5%), friends (46.4%), health professionals (20.9%), teachers (13.3%) and the Internet (1.5%).

Table 2. Association between communication about contraception and sexual behavior assessed from the sexual initiation and use of contraceptive methods. João Pessoa, PB, 2011

	Communication on contraception					
Sexual behavior	Yes	No	Total	р		
	n = 372 (65.5%)	n = 196 (34.4%)	n = 568 * (100%)			
Sexual initiation	365 (65.3)	194 (34.7)	* 559 (100)			
(N = 561)	565 (65.5)	171 (31.7)	337 (100)			
No	276 (62.6)	165 (37.4)	441 (100)	0.009		
n = 441	270 (02.0)	105 (57.4)	(100)	0.007		
Yes	89 (75.4)	29 (24.6)	* 118 (100)			
n = 120	07 (10.1)	_/ (2 110)	(100)			
Contraception use	89 (75.4)	29 (24.6)	* 118 (100)			
(N = 120)	ov (1011)	_/(L 110)				
No	40 (70.2)	17 (29.8)	57 (100)	0201		
n = 59	10 (70.2)	(27.0)	0, (100)	0201		
Yes	49 (80.3)	12 (19.7)	61 (100)			
n = 61		(1).7)				

\* No answer = 2

p = significance level of the chi-square test

Knowledge of contraceptive methods

J. res.: fundam. care. online 2016. jan./mar. 8(1):3597-3608

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More than half of participants (53.9%, n = 307) said they did not know any contraceptive method. This was most evident in the female group (n = 154, 59.8%, p = 0.016) among younger adolescents (n = 221, 57.6%, p = 0.025) and in the group of adolescents who did not start their sexual experiences (n = 261, 59.7%, p = 0.001).

Among those who said they knew some method, the condom was cited by 74.5% of them (n = 190). The hormonal contraceptives alone was mentioned by 5.9% (n = 15) and associated with the condom by 18.5% (n = 47). The condom was quoted primarily by male adolescents (68.4%, n = 130), while the hormonal contraceptive was reported by teenage females (86.7%, n = 13).

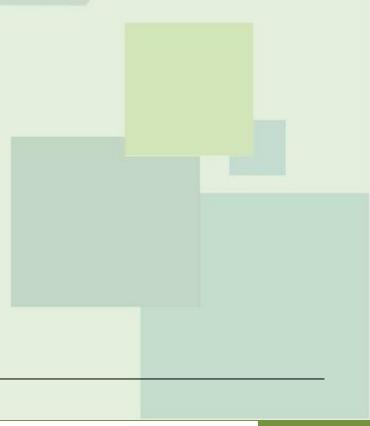
#### Attitudes of teenagers about contraception

The investigation of the attitudes presented a percentage of favorable attitudes below 50% for most items in the Likert scale (Table 3)

Unfavorable attitudes to contraception were primarily evidenced in low disagreement verified in the items: "Using contraception makes the relationship very serious " (n = 94); "Hormonal contraceptives are fattening" (21.7%, n = 123), "Hormonal contraceptive makes future pregnancy difficult " (24.1%, n = 137) and "Hormonal contraceptive damages health" (28.1%, n = 158).

Also, while 89.8% (n = 507) of adolescents agreed that contraception should be a concern of the couple, only 35.6% (n = 201) of them disagree that contraception should be an exclusive concern of women and while 62.9% (n = 352) of adolescents agree with the item "pregnancy is more fattening than hormonal contraceptives", only 21.7% (n = 123) disagree with the item " hormonal contraceptive are fattening."

In general, there was no statistically significant difference in attitudes on age and sexual experience of adolescents.



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# Table 3. Favorable attitudes to contraception to adolescent students of publicelementary schools in the city of João Pessoa, PB, 2011

Likert scale items		Total adolescents (n = 570)		
		%	(N)	
1. Access to MCs is difficult.		46.7	(265)	
2. Sex with condom is not good	2. Sex with condom is not good			
3. Use of MCs indicates lack of confide	48.3	(274)		
4. Use of MCs makes the relationship s	16.6	(94)		
5. I find it difficult to talk about sex w	53.7	(304)		
6. Hormonal contraceptives affect wo	28.1	(158)		
7. Hormonal contraceptives are fatten	21.7	(123)		
8. After using MCs it is difficult to con-	24.1	(137)		
9. MCs are a female concern	9. MCs are a female concern			
10. MCs promotes greater sexual freedo	om	60.5	(340)	
11. Pregnancy is more fattening than he	ormonal contraceptive	62.9	(352)	
12. MCs is a concern for the couple		89.7	(507)	
13. It is important to know the MCs before sexual initiation			(474)	
14. There is no difficulty using MCs		57.4	(324)	

Legend:

MCs - Contraceptive methods

This study presents adolescents with similar social conditions to those considered most vulnerable to teenage pregnancy.<sup>3,4</sup> They are from low-income families with elementary education and most are in early adolescence. These adolescents have initiated sexual activity without contraceptive orientation and knowledge and attitudes that limit the use of contraceptive methods. They are exposed to unplanned pregnancy, which is verified by showing that most adolescents who initiated their sexual practices have never used any contraceptive method.

Yet among teens who said they knew some method or use it, the condom was the most referenced contraceptive method.<sup>8,3</sup> However, the condom is an option whose effectiveness depends on the discipline of the users, which is not a reality of the sexual behavior of adolescents. In this sense, these data strengthen the evidence that even when contraception is used by teenagers, it uses a less effective method as the condom. And, even using other methods, teenagers do if irregular and inconsistent.<sup>14,17</sup>

With respect to attitudes, it is known that positive attitudes are more related to the use of contraceptive methods<sup>18,19</sup> and there is an ambivalence of attitudes in the relationship between pregnancy and contraception.<sup>20,21</sup>

This way, this study finds that attitudes are presented as limiting factors to contraception as are related as a threat to health, fertility and aesthetics.<sup>22</sup>

The data found show the lack of contraceptive counseling and the vulnerability of these adolescents to early pregnancy and should highlight the role of parents, health professionals and teachers who are among the main sources of information on the subject. Although the evidence of literature that communication with adolescents about sexual behavior and prevention of pregnancy increases the use of contraceptives by adolescents<sup>23,25</sup>, there is a discomfort to address this topic with adolescents, apart from the fear to be encouraging them into sexual initiation.<sup>26</sup>

Moreover, even when you talk to teens the information tend to be partial, ambiguous or inaccurate<sup>6,26,27</sup> and in that sense, it turns out that there was no difference in the use of contraception among adolescents who had not spoken or on the subject.

This way, studies have warned about the importance of the content and the quality of discussions, such as superiority of the results found in contraceptive counseling and access to contraceptive methods when compared to sexual orientation directed only to sexual abstinence.<sup>28,32</sup>

Given this evidence, this study highlights the lack of contraceptive guidance provided to adolescents and the role of health professionals as a promoter of communication about contraception and its responsibility in the quality of information provided to adolescents should be highlighted in order to promote knowledge and motivation for the use of contraception by adolescents who choose to start their sexual practices.

Although the methodological choices of this exploratory study affect the generalization, the results provide data that warn of the contraceptive guidance of adolescents and may favor the course of new research that aims to reduce the vulnerability of adolescents to pregnancy.

# CONCLUSION

Adolescents begin their sexual experiences without knowledge and attitudes that encourage contraception. Many never talked about it and most teenagers have never used any contraceptive method. Sexual initiation is more evident in males while the lack of any contraceptive method is most evident in women's groups and younger adolescents. There is no significant difference in communication, attitudes and use of contraceptive methods in relation to gender or age of the participants. This article reinforces the importance of communication about contraception with adolescents before sexual initiation and portrays the vulnerability they are exposed to as teens who have started without proper guidance.

Parents, health professionals and teachers, adults are recognized as sources of information on contraception and need to be warned about the potential for this change in reality.

It is worth noting that these results can not be generalized, but contribute to warn of the importance of motivation and empowerment of adolescents to the use of contraceptive methods and development of a protected sexual practice.

## REFERENCES

1. Sigusch V: The neosexual revolution. Arch Sex Behav 1998; 27(4):331-59.

2. Hugo TDO, Maier VT, Jansen K, et al: Factors associated with age at first intercourse: a population-based study. Cad. Saúde Pública 2011;27(11):2207-2214.DOI: 10.1590/S0102-311X2011001100014

3. UNICEF. The state of the world's children 2011: Adolescence an age of opportunity. 2011. Available from:

http://www.unicef.org/adolescence/files/SOWC\_2011\_Main\_Report\_EN\_02242011.pdf (accessed 5 jan 2013)

4. UNICEF. Fundo das Nações Unidas para a Infância: O direito de ser adolescente -Oportunidade para reduzir vulnerabilidades e superar desigualdades. 2011. Available from: http://www.unicef.org/brazil/pt/br\_sabrep11.pdf (accessed 5 jan 2013)

5. Carvalho KA, Sant'Anna MJ, Coates V, et al. Contraception, adolescence, and ethics in Brazil: are we prepared? Int J Adolesc Med Health 2008;20(4):529-36.

6. Eisenberg M. E, Sieving R. E, Bearinger L. H, et al: Parents' communication with adolescents about sexual behavior: A missed opportunity for prevention? J Youth Adolesc 2006;35:893-902.

7. Borges ALV, Nichiata LYI, Schor N: Talking about sex: the social and familial net as a base for sexual and reproducive health promotion among adolescents. Rev Lat Am Enfermagem 2006;14:422-7.

Kaye Wellings et al. Sexual behaviour in context: a global perspective. Lancet 2006; 368:
1706-28

9. Carrasco-Garrido P, López de Andrés A, Hernández Barrera V, et al. Predictors of contraceptive methods among adolescents and young women residing in Spain. J Sex Med 2011;8:2431-2438

10. Feldman BS, Shtarkshall RA, Ankol OE, et al. Diminishing Gender Differences in Condom Use Among a National Sample of Young Israeli Men and Women Between 1993 and 2005. J Adolesc Health 2012;50:311-314

Costa GPO, Guerra AQS, Araújo ACPF.

Knowledge, attitudes and ...

11. Fortenberry JD, Schick V, Herbenick D, Sanders SA, Dodge B, Reece M. Sexual behaviors and condom use at last vaginal intercourse: A national sample of adolescents ages 14 to 17 years. J Sex Med 2010;7(suppl 5):305-314.

12. Tschann JM, Flores E, Groat CL, Deardorff J, Wibbelsman CJ. Condom Negotiation Strategies and Actual Condom Use Among Latino Youth. J Adolesc Health.2010;47:254-262.

13. Reece M, Herbenick D, Schick V, Sanders SA, Dodge B, Fortenberry JD. Condom use rates in a national probability sample of males and females ages 14 to 94 in the United States. J Sex Med. 2010;7(suppl 5):266-276.

14. Glasier A, Gülmezoglu AM, Schmid GP, Moreno CG, Van Look PF. Sexual and reproductive health: a matter of life and death. Lancet. 2006;368:1595-607. [22]Santelli JS, Morrow B, Anderson JE, Lindberg LD.Contraceptive use and pregnancy risk among U.S. high school students, 1991-2003. Perspect Sex Reprod Health. 2006; 38(2):106-111.

15. Isaacs JN, Creinin MD. Miscommunication between healthcare providers and patients may result in unplanned pregnancies. Contraception. 2003;68:373-376.

16. Trussell J. Contraceptive failure in the United States. Contraception 2004; 70: 89-96.

17. Scott ME, Wildsmith E, Welti K, Ryan S, Schelar E, Steward-Streng NR. Adolescent Sexual Behaviors and Reproductive Health in Young Adulthood. Perspectives on Sexual and Reproductive Health. 2011; 43:2.

18. Manlove J, Ikramullah E, Terry-Humen E. Condom Use and Consistency Among Male Adolescents in the United States. J Adolesc Health. 2008;43(4):325-333.

19. Robertson AA, Stein JA, Baird-Thomas C. Gender differences in the prediction of condom use among incarcerated juvenile offenders: testing the information-motivation-behavior skills (IMB) model. J Adolesc Health.2006;38:18 -25.

20. Brückner H, Martin A, Bearman PS. Perspectives on Sexual and Reproductive Health. Ambivalence and Pregnancy:Adolescents'Attitudes, Contraceptive Use and Pregnancy. 2004;36(6):248-257.

21. Heavey EJ, Moysich KB, Hyland A, Druschel CM, Sill MW. Differences in Pregnancy Desire Among Pregnant Female Adolescents at a State-Funded Family Planning Clinic. J Midwifery & Women's Health. 2008;53(2):130-137.

22. Sundstrom B. Fifty years on "the pill": a qualitative analysis of nondaily contraceptive options. Contraception. 2012;86(1):4-11.

23. Dilorio C, Pluhar E, Belcher L: Parent-child communication about sexuality: A review of the literature from 1980- 2001. J HIV/AIDS Prev Educ Adolesc Child 2003;5(3-4):7-31.

24. Miller KS, Fasula AM, Dittus P, et al: Barriers and facilitators to maternal communication with preadolescents about age-relevant sexual topics. AIDS Behav 2009; 13(2):365-74.

25. Ogle S, Glasier A, Riley SC: Communication between parents and their children about sexual health. Contraception 2008;77(4):283-8.

26. Jerman P, Constantine NA: Demographic and psychological predictors of parent-adolescent communication about sex: A representative statewide analysis. J Youth Adolesc 2010;39(10):1164-1174.

27. Crichton J, Ibisomi L, Gyimah SO: Mother-daughter communication about sexual maturation, abstinence and unintended pregnancy: Experiences from an informal settlement in Nairobi, Kenya. Journal of Adolescence 2012;35,21-30

Paluzzi P: Reproductive rights: A call to action. J Midwifery Womens Health 2006; 51:397-401.

Knowledge, attitudes and ...

Costa GPO, Guerra AQS, Araújo ACPF.

29. Isley MM, Edelman A, Kaneshiro B, et al: Sex education and contraceptive use at coital debut in the United States: results from Cycle 6 of the National Survey of Family Growth. Contraception 2010; 82(3):236-42.

30. Lindberg LD, Santelli JS, Singh S: Changes in formal sex education: 1995-2002. Perspect Sex Reprod Health 2006;38:182-189.

31. Kirby D, Short L, et al. School-based programs to reduce sexual risk behaviors: a review of effectiveness. Public Health Reports, 1994;109(3):339-360.

32. Oringanje C, Meremikwu MM, Eko H, et al. Interventions for preventing unintended pregnancies among adolescents. Cochrane, 2009. www.cfah.org/hbns/archives/viewSupportDoc.cfm?supportingDocID=838 (accessed 20 dec 2012.

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J. res.: fundam. care. online 2016. jan./mar. 8(1):3597-3608