



Original Article

A Study of Menstruation of Middle School Students

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1)

Abstract

Purpose: This study was to provide preliminary data for menstrual education and research for the early adolescents. **Methods:** Participants were 320 middle school students in Gangreung city. Data collection was done from May 1 to May 30, 2004 by self administered questionnaires. **Results:** In recollecting of menarche experiences, students felt more negative (happy 18.5%, confused 72.6%, embarrassed 82.2%, angry 38.1%, proud 26.2%, excited 15.6%, surprised 54.7%). For menarche preparation, there was a low level of explanations & knowledge of menstruation, and preparedness for menarche. Key informants regarding menstruation experiences were the mother and school teacher. The mean age of menarche was 12.3years old. 66.6% had premenstrual symptoms, and the mean score of VAS for dysmenorrhea was 4.50. Significant variables related to the VAS score were embarrassed of menarche experience(F=3.38, p=.019), preparedness for menarche(F=2.86, p=.038), and premenstrual symptoms(t=63.36, p.000). **Conclusion:** Preparation for a positive menarche experience prior to menarche is necessary. More active menstrual education should be given for early adolescents in the

school and family setting. Replication studies in other regions and developing a menstrual education program is recommended. Systematic examinations of perimenstrual discomforts for early adolescents should be followed.

Key words : Menarche, Menstruation, Education, Early adolescent

(Ministry of education, 2001).

(Kim, 1995).

: 2005 5 11 1 : 2005 5 20 2 : 2005 5 30 : 2005 6 10

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13

et al., 2004).

(Kim, 1995; Min, 2003),

가

가 (Chung, 1995; Martin, 1992).

가

(Kaplan & Sedney, 1992).

가

(Morabia & Costanza, 1998).

가

가

(Rubinow & Roy-Byrne,

1981),

가

1

가

1,

2,3

(Wilson & Keye, 1989).

340

320 가

73.9%가

가

3. 측정 도구

(Cho, Kim, Kim, Cho, & Hwang,

1999).

1)

Woods, Most Dery(1982)

8

3

(, ,) , 3

(, , 가),

(Park &

() 7

Min, 2004).

가

2)

연구의 목적

3)

1. 초경 경험

0 10 VAS
 18.5% 65.6%
 가
 4. 자료수집 방법 72.6% , 21.6%
 가 82.2%가
 , 13.1% 가
 10 2004 5 1 38.1%, 52.2%,
 5 30 , 26.2%, 60.0%
 가 가 15.6%,
 가 70.0% ,
 가 54.7%, 35.9%
 15-20

<Table 1>.

5. 자료 분석 방법

SPSS +PC Win 10.0 Version

2. 월경 준비도

, 2.2%,
 , 69.4% ,
 , t 15.6% .
 , ANOVA , Pearson 가
 10.3%, 76.6%
 6. 연구의 제한점 가 가
 가 50.3% ,
 32.5%
 가 85.0% 가 ,
 , 6.6%, 4.1%
 () 63.1%,
 41.6%, 4.1% <Table 2>.

3. 월경 특성 및 월경 불편감 경험

, , 13.73±.93 , 157.83±
 4.99 , 50.25±7.76Kg .

<Table 1> Recollection of menarche experiences (N=320)

Characteristics	Not at all	Slightly agree	Quitely agree	Very much agree	No response
	Number (%)				
Happy	210(65.6)	52(16.3)	5(1.6)	2(0.6)	51(15.9)
Confusing	69(21.6)	133(41.6)	63(19.7)	36(11.3)	19(5.9)
Embarrassing	42(13.1)	102(31.9)	90(28.1)	71(22.2)	15(4.7)
Angry	167(52.2)	73(22.8)	25(7.8)	24(7.5)	31(9.7)
Proud	192(60.0)	66(20.6)	15(4.7)	3(0.9)	44(13.8)
Exciting	224(70.0)	41(12.8)	6(1.9)	3(0.9)	46(14.4)
Surprising	115(35.9)	97(30.3)	48(15.0)	30(9.4)	30(9.4)

<Table 2> Menstruation preparedness (N=320)

Characteristics/Categories	Number(%)
Explained level about menstruation	
Not at all	7(2.2)
Slight done	222(69.4)
Well done	50(15.6)
No response	41(12.8)
Knowledge level prior to menstruation onset	
Never	33(10.3)
A little knew	245(76.6)
Quitely knew	28(8.8)
Very much knew	2(0.6)
No response	12(3.8)
Preparedness to menarche	
Never done	161(50.3)
Slightly prepared	104(32.5)
Quitely prepared	9(2.8)
Very much prepared	2(0.6)
No response	44(13.8)
First person who was contacted as menarche was begun	
Mother	272(85.0)
Sister	21(6.6)
Friends	13(4.1)
Brother	5(1.6)
Father	4(1.3)
Aunt	3(0.9)
No body	2(0.6)
Person giving explanation about menstruation	
Teacher	202(63.1)
Mother	133(41.6)
Grandmother	13(4.1)
Friends	7(2.2)
Sister	5(1.6)
Brother	2(0.6)

12.25±1.09 , 28.18±5.57 , 57.5% , 94.4% , 5.65±1.39 , 72.5% , 22.5%가 , 5.0%가 , 1-2 가 33.4%, 2 가 22.8%, 3 가 20.6%, 2 가 10.9% , 66.6% , 33.4% , VAS , 10 4.50± 2.73

<Table 3>

<Table 3> Dysmenorrhea and premenstrual symptoms (N=320)

Characteristics/Categories	Number(%)
VAS pain scores Mean(SD)	4.50(2.73)
Premenstrual symptoms	
No	107(33.4)
Yes	213(66.6)
If yes (multiple reply)	
Abdominal cramp	110(45.8)
Anxiety	59(24.6)
Backache	26(10.8)
Mood change	21(8.8)
Bothersome	8(3.3)
Breast pain	4(1.7)
Indigestion	4(1.7)
Headache, dizziness	3(1.3)
Skin problem	3(1.3)
General bodyache	2(0.8)

4. 초경 경험, 월경 준비도, 월경 특성에 따른 월경 불편감의 차이 및 월경특성 간 관련성

 VAS , (F=3.38, p=.019), (F=2.86, p=.038), (t=63.36, p=.000)

<Table 4>

(r=.13, p=.016), (r=.44, p=.000),

<Table 4> Comparison of VAS according to menarche experiences, menstruation preparedness, and menstrual variables (N=320)

Characteristics	Categories	Mean ±SD	t or F	P value
Menarche experiences				
Happy	Not at all	4.58±2.85	1.88	.133
	Slight	4.12±2.76		
	Quite	7.00±1.41		
	Very much	6.00±1.41		
Confusing	Not at all	4.02±2.90	1.35	.258
	Slight	4.50±2.79		
	Quite	4.98±2.62		
	Very much	4.58±2.57		
Embarrassing	Not at all	4.27±2.69	3.38	.019*
	Slight	4.16±2.63		
	Quite	4.40±2.70		
	Very much	5.42±2.86		
Angry	Not at all	4.33±2.70	1.09	.355
	Slight	4.71±2.70		
	Quite	4.64±2.72		
	Very much	5.33±3.43		

<Table 4> Comparison of VAS according to menarche experiences, menstruation preparedness, and menstrual variables(continued) (N=320)

Characteristics	Categories	Mean±SD	t or F	P value
Proud	Not at all	4.52±2.88	1.42	.237
	Slight	4.08±2.60		
	Quite	5.20±2.31		
	Very much	6.67±.58		
Exciting	Not at all	4.48±2.82	.49	.687
	Slight	4.79±2.59		
	Quite	3.50±2.95		
	Very much	5.33±4.04		
Surprising	Not at all	4.21±2.95	1.33	.258
	Slight	4.61±2.49		
	Quite	4.57±2.87		
	Very much	5.07±2.69		
Menstruation preparedness				
Explained level	Not at all	3.86±1.95	1.45	.237
	Slightly done	4.36±2.75		
	Well done	5.06±3.04		
Knowledge level	Never done	4.33±2.77	.93	.427
	A little knew	4.40±2.69		
	Quite knew	5.29±3.07		
	Very much knew	4.00±2.83		
Preparedness to menarche	Never done	4.52±2.80	2.86	.038*
	Slightly done	4.21±2.66		
	Quite done	7.00±2.83		
	Very much	4.00±5.66		
Menstrual variables				
Menstrual cycle	Known	4.41±2.82	.47	.494
	Unknown	4.63±2.61		
Menstrual duration	Known	4.50±2.73	.05	.829
	Unknown	4.64±2.93		
Premenstrual symptom	Yes	5.35±2.47	63.36	.000***
	No	3.04±2.54		
Menstrual amount	Small	4.00±3.18	2.50	.084
	Moderate	4.35±2.52		
	Heavy	5.12±2.73		
Menstrual regularity	Within 2days	4.24±2.76	.96	.413
	Within 3days	4.55±2.37		
	1-2wks variation	4.52±2.88		
	More than 2wks	5.20±3.04		

*p<.05 ***p<.001

(r=-.18, p=.015), (r=.13, p=.027), (r=.37, p=.000), (r=-.12, p=.034), (r=.16, p=.028), (r=.29, p=.000), (r=.16, p=.010)

<Table 5>.

가 (Chung, 1995; Kim, 1995; Woods et al., 1982).

Woods (1982) 58%, 65%, 75%, 67%, 가 29%, 82%, 80%

Chung(1995)

Min(2003)

가

가

가

가

<Table 5> Pearson correlation coefficients between menstrual variables (N=320)

	Age	Height	Weight	Menarche	Cycle	Duration	Amount
Height	.13(.016*)						
Weight	.04(.519)	.37(.000***)					
Menarche	.44(.000***)	-.06(.305)	-.12(.034*)				
Cycle	-.18(.015*)	-.10(.179)	-.06(.453)	.01(.886)			
Duration	-.04(.484)	-.04(.457)	-.07(.241)	-.01(.886)	.16(.028*)		
Amount	-.09(.126)	-.01(.855)	-.02(.750)	-.09(.103)	.02(.800)	.29(.000***)	
Regularity	.13(.027*)	.00(.967)	-.05(.378)	.11(.058)	.09(.219)	.16(.010**)	.11(.059)

가 . 13.9% , Lim (1994) 46.2%,
 Park Min(2004) Jung(1991) 76%가
 가
 Kim(1995) 가 .
 가
 (Chung, 1995; (Hong et al., 1998)
 Clarke & Rubble, 1978; Kim, 1995; Stolzman, 1986).
 가
 가
 가
 Shin (1996) 10 가 12.25
 12.96
 57.5%
 가
 가
 44.3% 가
 가
 Jang, Park, Cho Kim(1991) 41.7%, Jung(1991)
 46.2%, Shin (1996) 33.3%가
 가
 63%
 가
 Derman, Kanbur, Tokur Kutluk(2004)
 71%
 가
 Hong (1998)
 Shin
 (1996)
 가
 Shin (1996)
 Lim (1994) 10
 23.4% , Shin (1996)
 77.8% Lim
 (1994) , , , , ,
 (Lee et al., 2004)
 Hong, Park, Kim Kim(1998)
 가
 4.5
 Jang (1991) 56.2% 가

가
가 . 2.
•
•
가
•
가
320 (PMS) 가
2004
5 1 5 30
SPSS +PC Win 10.0 Version , t , PMS
ANOVA , Pearson correlation coefficient 가
72.6%, 82.2%
가
66.6%, VAS 12.3
4.50 5.7
28.2 , 72.5%
1-2 가 33.4%
VAS
(F=3.38, p=.019), (F=2.86,
p=.038), (t=63.36, p=.000)
(r=.44, p=.034), (r=-.12, p=.034)

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