




2000 12

김문정의 보건학석사 학위논문을 인준함

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연세대학교 보건대학원

2000년 12월 일

가

가

2

가

2000. 12.

.....	i
•	1
1.	1
2.	4
•	5
1.	5
2.	7
3.	11
•	13
1.	13
2.	14
3.	15
•	19
1.	19
2.	23
3.	26
4.	30
•	32
•	39
.....	41
.....	44
.....	46

1.	14
2.	18
3.	20
4.	22
5.	23
6.	24
7.	25
8.,	27
9.,	28
10.,	29
11.,	31

가

가 .

가

,

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, 2000 10 17 10 28

285

.

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1.

,

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가

2.

.

,

3.

가 가 ,

.

4.

가 , 1

가 A

가 가 ,

B

가 .

5.

,

B

가 가

,

가

가

.

A

가

,

가

.

A

가 가

,

가

,

가

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,

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: , , , , , ,

I.

1.

가

가

가

.

,

가

가

(, 1990).

,

가

,

1950

1970

,

,

(Milne , 1981).

가

가 .

3

가 , .

가 ,

가

(Zlotogorski, 1997),

(Siegrid,

2000). Kohut(1999)

가

가

가

가

가

가

가

가
가

가
· ,
· ,

2.

가.

II.

1.

가
(, 1994).
(Donabedian, 1980).
가
가
가
(1993) 가
가
Swan(1985) 4 LISREL model
가
가
가

Donabedian(1988) (technical performance)
(interpersonal relationship management)

.
,
가 가
. 가 가
가 가 . Donabedian 가
, ,
가 .
가
,
(, 1995).

2.

가.

1950

가

20

가

(, 1999).

가

18-22 가

32-34

가 (, 1999).

100% 가

(1),

(2), (3)

(sensitivity)

14-85%, 93-99% (Chitty, 1991; Shirley, 1992; Nicolaides, 1992; Luck, 1992; D'Alton, 1994; Sara H,

1994).

가

61

56.2%

20-30%

(Grandjean , 1999).

Pretorius Nyberg (1994)

가

가

“ ‘100% ’ , 가
” (Brent , 1991)

Brent (1991) 가 가

21

가

“ ”

. Campbell (1993) 2 8 72 70

-

(

2.8, 95% 1.5-5.3; $p \leq 0.001$). Dyke(1994)

가

가

가

. Salvesen (1992) 1107

1184

7

가

Salvesen Eik-Nes(1995)

, , , ,

.

가

가

3.

가.

가

가

가

(Klein, 1950, Leifer, 1980). Michelacci(1988)

Zlotogorski(1997)

가

(Siegrid, 2000).

(Informed choice)

Kohut(1999)

가

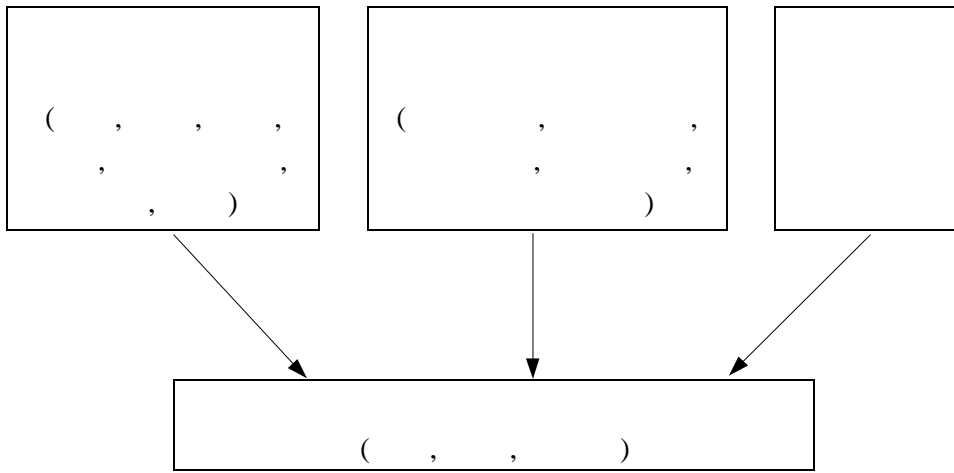
가

가 , ,
가
,
, 54% 2
.

III.

1.

(1).



1.

300

. 1 , 2 , 3
100

(1).

1.

A	B	C
1	2	3
10	400	1,100
100	750	330
49%	15%	3.6%
180	2,159	1,500
10	4	4
		/
30 -1	30 -1	1
25,000	70,000	70,000
		35,000
3	6	1
Medison()	ATL()	Acuson()
	GE()	
	Acuson()	

2.

36 , 16 , 20
 6 , 9 , 1

Kohut(1999)가

1

2000 9 1 3 B

30

43

7

36

Likert 5 ‘ ’ 5 , ‘ ’ 4 , ‘
, ‘ ’ 3 , ‘ ’ 2 , ‘ ’ 1

2000 10 17 10 28 12

가

, 300 15 285

A 93%, B

94%, C 98%

3.

가 (2).

, ‘
, ‘

. 가
t - test, ANOVA test χ^2 .
.
, ,
(multiple regression analysis) .

2.

1.<30 2.≥30
1. 2. 3. 4.
1. 2. 3.
1. 2.
1. <200 2.200-299 3.300-399 4.≥400

1.1 2.2 3.3
1. 2.
1. 2.
1.≤12 2.13-27 3.≥28
1. 2.
1. 2.
1. 2.
1. 2.
1. 2.
1.1 2.2 3.3 4.4
1. A 2. B 3. C

1. 2.
3. 4.
5.

- ,
- ,
-

가

1. 2.
3. 4.
5.

1. 2.
3. 4.
5.

IV.

1.

가.

, , ,
, 가 3 .
29.9 , , .
가 가 가
82.8% , 가 51.2% .
 χ^2 가 .

3.

	A	B	C		χ^2
					1.65
<30	50(53.8)	44(46.8)	44(44.9)	138(48.4)	
≥30	43(46.2)	50(53.2)	54(55.1)	147(51.6)	
					5.6
	28(30.5)	37(39.8)	30(30.6)	95(33.6)	
	17(18.5)	9 (9.7)	14(14.3)	40(14.1)	
	12(13.0)	15(16.1)	12(12.2)	39(13.8)	
	35(38.0)	32(34.4)	42(42.9)	109(38.5)	
	1	1		2	
					3.99
	14(15.1)	21(22.3)	14(14.3)	49(17.2)	
	65(69.8)	64(68.1)	68(69.4)	197(69.1)	
	14(15.1)	9 (9.6)	16(16.3)	39(13.7)	
					5.0
	40(43.0)	48(51.1)	58(59.2)	146(51.2)	
	53(57.0)	46(48.9)	40(40.8)	139(48.8)	
					9.72
<200	22(23.7)	34(36.6)	38(38.8)	94(33.1)	
200-299	28(30.0)	31(33.2)	26(26.5)	85(29.9)	
300-399	22(23.7)	18(19.4)	16(16.3)	56(19.7)	
≥400	21(22.6)	10(10.8)	18(18.4)	49(17.3)	
		1		1	
	93(100.0)	94(100.0)	98(100.0)	285(100.0)	

4.

					; (%)
					χ^2
	A	B	C		
					0.212
1	51(57.3)	34(38.2)	40(40.8)	125(45.3)	
2	25(28.1)	29(32.6)	33(33.7)	87(31.5)	
3	13(14.6)	26(29.2)	25(25.5)	64(23.2)	
	4	5		9	
					2.624
	68(73.1)	62(66.0)	61(62.2)	191(67.0)	
	25(26.9)	32(34.0)	37(37.8)	94(33.0)	
					7.846*
	73(78.5)	56(59.6)	68(69.4)	197(69.1)	
	20(21.5)	38(40.4)	30(30.6)	88(30.9)	
					17.78***
≤12	6 (6.5)	28(30.8)	4 (4.1)	38(13.5)	
13-27	41(44.6)	27(29.7)	26(26.5)	94(33.5)	
≥28	45(48.9)	36(39.6)	68(69.4)	149(53.0)	
	1	3		4	
					1.14
	78(83.9)	73(78.5)	81(83.5)	232(82.0)	
	15(16.1)	20(21.5)	16(16.5)	51(18.0)	
		1	1	2	
					0.23
	79(84.9)	82(87.2)	85(86.7)	246(86.3)	
	14(15.1)	12(12.8)	13(13.3)	39(13.7)	
					0.951†
	89(95.7)	90(95.7)	96(98.0)	275(96.5)	
	4 (4.3)	4 (4.3)	2 (2.0)	10 (3.5)	
					2.72
	78(83.9)	76(80.9)	73(74.5)	227(79.6)	
	15(16.1)	18(19.1)	25(25.5)	58(20.4)	
					5.31
	32(34.8)	39(41.5)	25(25.8)	96(33.9)	
	60(65.2)	55(58.5)	72(74.2)	187(66.1)	
	1		1	2	
					21.58***
1	6(17.6)	19(40.5)	10(16.7)	35(24.8)	
2	4(11.8)	12(25.5)	16(26.7)	32(22.7)	
3	5(14.7)	9(19.1)	16(26.7)	30(21.3)	
4	19(55.9)	7(14.9)	18(30.0)	44(31.2)	
	59	47	38	144	
	93(100.0)	94(100.0)	98(100.0)	285(100.0)	

† Fisher's Exact Test, * p < 0.05, *** p < 0.001

2.

, ,

가.

3.83 ‘

’가

가

.

가

,

.

,

(5).

5.

: (%)

							†
		33(11.8)	48 (17.2)	53 (19.0)	84 (30.1)	61(21.9)	3.33
1		63(23.0)	59 (21.5)	55 (20.1)	61 (22.3)	36(13.1)	2.81
()							
2		15 (5.4)	28 (10.1)	28 (10.1)	114(41.3)	91(33.0)	3.86
()							
3		5 (1.8)	8 (2.8)	9 (3.2)	80 (28.5)	179(63.7)	4.49
()							
		6 (2.2)	26 (9.5)	33 (12.0)	110(40.0)	100(36.4)	3.99
		2 (0.7)	33 (11.8)	63 (22.6)	98 (35.1)	83(29.7)	3.81
가		2 (0.7)	14 (5.0)	14 (5.0)	156(55.7)	94(33.6)	4.16
		1 (0.4)	14 (5.0)	13 (4.7)	182(65.2)	69(24.7)	4.09
							3.83

† ‘1.

~ 5.

’ 5

가 3.45 . 가
 , 가
 4.53 , 가
 2.54 (6).
 90.8%가 ‘
 , 31.8%
 63.9%가
 가 39.3% 가

6.

: (%)

						†
63(22.5)	116(41.4)	12 (4.3)	65(23.2)	24 (8.6)	2.54	
38(15.1)	92(36.5)	26(10.3)	75(29.8)	21 (8.3)	2.80	
2 (0.7)	13 (4.8)	10 (3.7)	61(22.5)	185(68.3)	4.53	
7 (2.6)	76(28.0)	15 (5.5)	106(39.1)	67(24.7)	3.55	
3 (1.1)	23 (8.4)	33(12.0)	99(36.1)	116(42.3)	4.10	
34(12.4)	66(24.0)	35(12.7)	108(39.3)	32(11.6)	3.14	
					3.45	

† 1. ~ 5. ’ 5

가 3.44 . 가

‘ , , , ‘ , ‘ , , ‘ , , ‘ .
 , ‘ ’가 2.59, ‘ ’ 2.86
 (7).

7.

: (%)

						†
5 (1.8)	14 (5.0)	36 (12.9)	139 (49.8)	85 (30.5)	4.02	
42 (15.1)	126 (45.2)	29 (10.4)	68 (24.4)	14 (5.0)	2.59	
36 (13.0)	104 (37.5)	17 (6.1)	104 (37.5)	16 (5.8)	2.86	
19 (6.9)	48 (17.5)	25 (9.1)	106 (38.5)	77 (28.0)	3.63	
8 (2.9)	31 (11.3)	67 (24.5)	110 (40.1)	58 (21.2)	3.65	
5 (1.8)	36 (13.1)	25 (9.1)	131 (47.8)	77 (28.1)	3.87	
						3.44

† ‘1. ~ 5. ’ 5

3.

, ,

가 . 가 가 4.09
가 , 가
가 .

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(8).

, ,

0.05

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0.10

,

.

가 가

,

가

.

가

(9).

가 . A

가

,

B

가

(10).

8.

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	±	t/F	±	t/F	±	t/F
< 30	3.79±0.56	-1.01	3.50±0.60	1.55	3.46±0.73	0.30
30	3.86±0.50		3.40±0.60		3.43±0.78	
	3.82±0.51	4.70**	3.46±0.59	1.14	3.39±0.80	1.20
	3.65±0.65		3.35±0.66		3.53±0.73	
	4.09±0.37		3.59±0.59		3.62±0.69	
	3.82±0.52		3.42±0.59		3.39±0.74	
	3.91±0.57	3.79*	3.44±0.54	0.44	3.43±0.69	0.60
	3.85±0.51		3.47±0.63		3.47±0.78	
	3.62±0.54		3.37±0.52		3.32±0.70	
	3.86±0.56	1.17	3.45±0.05	0.04	3.47±0.72	0.62
	3.79±0.51		3.45±0.58		3.41±0.79	
<200	3.90±0.52	2.28	3.37±0.60	0.83	3.36±0.63	1.95
200-299	3.88±0.46		3.48±0.65		3.56±0.75	
300-399	3.76±0.62		3.50±0.54		3.53±0.73	
≥400	3.68±0.54		3.51±0.58		3.29±0.98	

*p < 0.05, ** p < 0.01

9.

	±	t/F	±	t/F	±	t/F
1	3.77±0.54	2.11	3.43±0.57	0.25	3.44±0.75	0.28
2	3.81±0.48		3.42±0.59		3.40±0.79	
≥3	3.93±0.57		3.48±0.64		3.50±0.75	
	3.80±0.54	-1.04	3.47±0.60	0.58	3.44±0.79	-0.17
	3.87±0.52		3.42±0.61		3.45±0.69	
	3.80±0.52	-1.18	3.45±0.60	-0.25	3.43±0.75	-0.43
	3.88±0.57		3.46±0.62		3.47±0.77	
	3.83±0.53	0.53	3.45±0.60	0.66	3.45±0.75	1.53
	3.67±0.19		3.22±0.25		2.78±0.96	
≤12	3.95±0.52	2.24	3.25±0.61	2.47*	3.49±0.70	0.92
13-27	3.74±0.57		3.47±0.59		3.51±0.68	
≥28	3.85±0.51		3.49±0.60		3.38±0.81	
	3.81±0.54	-1.15	3.49±0.59	1.91*	3.48±0.73	1.41
	3.91±0.52		3.31±0.65		3.31±0.85	
	3.83±0.53	-0.70	3.45±0.60	-0.94	3.44±0.76	0.25
	4.04±0.38		3.78±0.38		3.33±0.17	
	3.82±0.54	-0.47	3.44±0.60	-0.88	3.46±0.77	0.96
	3.87±0.50		3.53±0.63		3.33±0.70	
	3.82±0.53	-0.51	3.45±0.60	-0.67	3.43±0.76	-1.02
	3.91±0.54		3.58±0.63		3.68±0.62	
	3.82±0.52	-0.24	3.44±0.63	-0.55	3.48±0.76	1.81*
	3.84±0.57		3.49±0.50		3.28±0.71	
	3.84±0.58	-0.42	3.47±0.59	-0.54	3.44±0.81	0.59
	3.87±0.43		3.52±0.62		3.37±0.77	
1	3.86±0.36	0.69	3.49±0.49	0.43	3.47±0.74	0.84
2	3.91±0.44		3.48±0.59		3.30±0.68	
3	3.83±0.67		3.35±0.52		3.19±0.90	
≥4	3.76±0.41		3.48±0.62		3.42±0.78	

* p< 0.10

10.

, ,

A	B	C	F
±	±	±	
3.79±0.54	3.95±0.43	3.75±0.59	3.97*
3.65±0.62	3.42±0.57	3.30±0.57	8.28***
3.82±0.72	3.41±0.62	3.12±0.76	23.14***
3.75±0.46	3.62±0.41	3.43±0.46	12.93***

* p < 0.05, *** p < 0.001

4.

, ,

A B , C B
 가 가 (11). 가
 가 가 . 가
 . 13 27 가 12
 가
 C B .
 가 가 가 ,
 가 가 .
 A B .
 400 200
 . 가
 .
 , ,
 19.0%, 21.2%, 29.5% , 25.5% .

11.

(:B)		A	-0.17 (0.11) [†]	0.14 (0.14)	0.54 (0.17)**		
		C	-0.22 (0.10)*	-0.23 (0.13) [†]	-0.22 (0.15)		
(:<30)		≥30	0.05 (0.09)	-0.12 (0.11)	0.05 (0.14)		
(:)			0.04 (0.09)	-0.05 (0.11)	-0.08 (0.14)		
			0.01 (0.13)	0.04 (0.15)	0.14 (0.19)		
			0.24 (0.14) [†]	0.40 (0.16)*	0.10 (0.21)		
(:)			0.08 (0.12)	0.10 (0.15)	0.14 (0.18)		
			-0.14 (0.16)	0.03 (0.20)	-0.11 (0.24)		
(:)			0.02 (0.09)	0.03 (0.11)	0.11 (0.13)		
(:<200)		200-299	-0.01 (0.10)	-0.05 (0.12)	0.14 (0.15)		
		300-399	-0.23 (0.12) [†]	-0.03 (0.15)	0.08 (0.19)		
		≥400	-0.25 (0.13) [†]	-0.04 (0.16)	-0.44 (0.20)*		
(:1)		2	-0.09 (0.14)	0.02 (0.12)	-0.22 (0.21)		
		≥3	-0.06 (0.23)	0.07 (0.22)	-0.21 (0.34)		
(:)			0.08 (0.13)	-	0.15 (0.19)		
(:)			0.15 (0.16)	0.15 (0.18)	0.29 (0.25)		
(:≤12)		13-27	-0.20 (0.15) [†]	0.40 (0.18)*	-0.05 (0.23)		
		≥28	-0.05 (0.15)	0.49 (0.18)**	0.03 (0.22)		
(:)			0.07 (0.10)	-0.09 (0.12)	0.06 (0.15)		
			0.04 (0.11)	0.17 (0.14)	0.02 (0.17)		
(:)			0.16 (0.20)	-	0.33 (0.31)		
			0.01 (0.10)	-0.08 (0.12)	-0.29 (0.15) [†]		
(:)			-0.04 (0.09)	0.06 (0.11)	-0.08 (0.13)		
R-square			0.2112	0.1903	0.2947		
F			1.629*	1.589 [†]	2.525***		

[†] p< 0.10 , * p<0.05, ** p<0.01, *** p<0.001

V.

1980

가

가

가

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:

가

, χ^2

가

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가

가

. A

가 가

A

가

. B

가

B 1 , 1 ,

1 3

4

가 A 55.9%, B 14.9%, C 30.0%

B C

3-4 A 10

3.83

가

가

74.3% 92.2% 가

44.5%

Kohut(1999)

54%

2

가 가

4.49, 2.81

64.8%가
 가 3.45
 90.8%가 ‘
 , 31.8%
 , 38.1%
 63.9%가
 Zlotogorski(1997)
 가 39.3% 가
 (24.0%), (12.7%)
 Kohut(1999)
 가
 가
 가
 3.44 . 가

, , 4

, , :

4.09 가 가 , 가 가 .

가 3.91

, ,
가 가

가 .

가

0.05

,

가 2.5%
가 30.8%

가

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 .
 , , 0.05
 .
 . A 가 가 가 1
 가
 , B 가 가
 가
 , 가
 가
 가
 가
 가
 가
 :
 ,
 ,
 , B

가

가

가

가

가 가

, A

,

가

A

가

가

가

19.0%, 21.2%, 29.5%

25.5%

가

가

가

가

69.1%, 13.7% 가 가 82.8%
 25
 (25) 13.1% (,
 1995), 20-29 12.70 , 30-39
 11.56 (, 1995). 29.9
 12 ,
 5
 () (82.8%)
 가 가
 2000 3 , 가 30-34
 2,072,221 (, 2000) , 가
 2,711,268 639,047
 가 가 가
 가
 3 2
 1

VI.

. 2000 10 17

10 28

285

가

SAS

χ^2

analysis)

, ANOVA t-test,

(multiple regression

4

가

가

,

.

가

,

가

가

가

가

가

.

가

가

.

(Guideline for routine ultrasound imaging in low risk pregnancy), 1999

- . . . , 1990
- . . . , 1993
- , . . . , 1994
- . . . , 1998
-
- . . . , 1995
- . 가 . 가 . 가 , 2000. (<http://www.nso.go.kr>)
- . / . (25 .), 1995 (<http://www.nso.go.kr>)
- . / . , 1995 (<http://www.nso.go.kr>)

Brent RL, Jensch RP, Beckman DA. Medical sonography: reproductive effects and risks. *Teratology*, 1991;44:123-146

Campbell JD, Elford W, Brant RF. Case-control study of prenatal ultrasonography exposure in children with delayed speech. *Canadian Medical Association Journal* 1993;149(10):1435-1440

Chitty LS, Hunt GH, Moore JL, Michael O. Effectiveness of routine ultrasonography in detecting fetal structural abnormalities in a low risk population. *British Medical Journal* 1991;303:1165-9

Donabedian A. *The definition of quality and approaches to its assessment*. Volume I. Health Administration Press, 1980

- Donabedian A. The quality of care: How can it be assessed? *JAMA* 1988;260(12):1743-1748
- Dyke C. Studying delayed speech (letter). *Canadian Medical Association Journal* 1994;150(5):647
- Grandjean H, Larroque D, Levi S, Eurofetus Study group. The performance of routine ultrasonographic screening of pregnancies in the Eurofetus Study. *Am J Obstet Gynecol* 1999;181:446-54
- Klein H, Potter H, Dyk R. *Anxiety in Pregnancy and Childbirth*. New York: Hoeber, 1950
- Kohut RJM. *Women's knowledge of prenatal ultrasound and informed choice*. Masters Abstracts International 1999
- Leifer M. *Psychological effects of motherhood*. New York: Praeger Publishers, 1980
- Luck CA. Value of routine ultrasound scanning at 19 weeks: a four year study of 8849 deliveries. *British Medical Journal* 1992;305:147-8
- Michelacci L, Fava GA, Grandi S, Boviceli L. Psychological reactions to ultrasound examination during pregnancy. *Psychother Psychosom* 1988;50:1-4
- Milne LS, Rich OJ. Cognitive and affective aspects of the responses of pregnant respondents to sonography. *Maternal-child Nurs J* 1981;10:15-39
- Nicolaides KH, Snijders RJM, Gosden CM, Berry C, Campbell S. Ultrasonographically detectable markers of fetal chromosomal abnormalities. *The Lancet* 1992;340:704-707
- Pretorius DH, Nyberg DA. *An overview of congenital malformations. Diagnostic Ultrasound of Fetal Anomalies; Text and Atlas*. Toronto, Mosby Year Book, 1994; 21-37

- Salvesen KA, Eik-Nes SH. Is ultrasound unsound? A review of epidemiological studies of human exposure to ultrasound. *Ultrasound Obstet Gynecol* 1995 Oct;6(4):293-8
- Salvesen KA, Balleteig LS, Eik-Nes SH. Routine ultrasonography in utero and school performance at age 8-9 years. *Lancet* 1992;339:85-89
- Sara HG, Mary ED. Diagnostic ultrasound in pregnancy: An overview. *Seminars in Perinatology*, 1994;18(3):117-132
- Shirley I, Bottomley F, Robinson V. Routine radiographer screening for fetal abnormalities by ultrasound in an unselected low risk population. *British Journal of Radiology* 1992;65:564-569
- Siegrid T, Albrecht J, Imelda M, et al. Between fear and relief: how rural pregnant respondents experience fetal ultrasound in a Botswana district hospital. *Social Science & Medicine* 2000;50:689-701
- Swan JE, Sawyer JC, Van Matre JG, McGee GW. Deepening the understanding of hospital patient satisfaction: fulfillment and equity effects. *J Health Care Mark* 1985;5(3):7-18
- Zlotogorski Z, Tadmor O, Rabinovitz R, et al. Parental attitudes toward obstetric ultrasound examination. *J Obstet Gynaecol Res* 1997; 23(1):25-28

Abstract

Pregnant women's Perception of Prenatal Ultrasound

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The purpose of this study is to assess the pregnant women's knowledge, attitude and satisfaction of prenatal ultrasound and to find out the factors. A self-administered questionnaires survey was conducted to two hundred eighty five pregnant women who visited obstetric departments of three hospitals located in Seoul from October 17, 2000 to October 28, 2000.

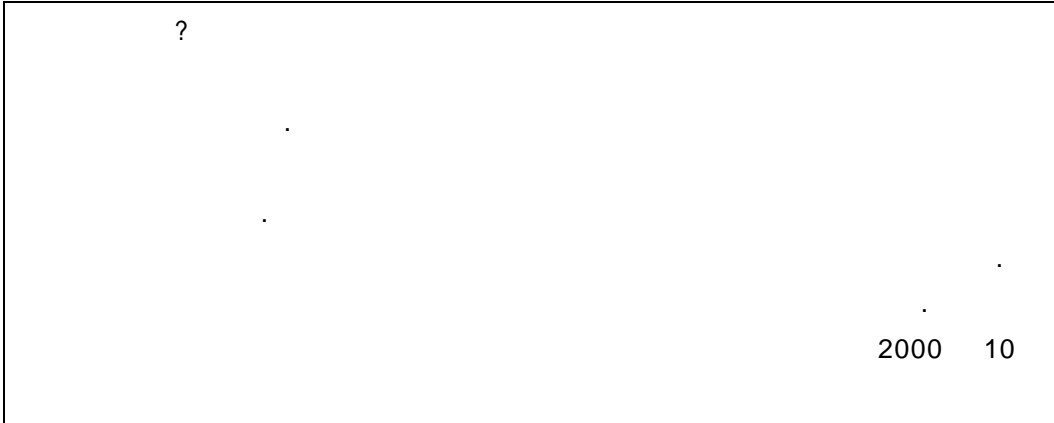
The major results are as follows.

1. Overall, respondents did not fully understand the purpose of prenatal ultrasound. The majority of respondents stated that the main purpose of prenatal ultrasound was to check for age, growth and development of the baby but only 44.5% of respondents understood the fact that chromosomal abnormalities cannot be diagnosed only by prenatal ultrasound. The majority of respondents were aware of the diagnostic limitations of ultrasound.

2. While the majority of respondents were aware of the importance of pre-examination information, only 31.8% of respondents received the information from their health care providers and only 38.1% of respondents stated that the received information was useful.
3. Regarding the examination quality, respondents were highly satisfied with the competency of the examination. But they stated the cost and waiting time were not acceptable.
4. The knowledge, attitude and satisfaction of prenatal ultrasound showed statistically significant differences according to the characteristics of each hospital.
5. In the result of multiple regression analysis, major factors for knowledge of prenatal ultrasound were characteristics of hospitals, religion, income and gestational age. Major factors for attitude toward prenatal ultrasound were characteristics of hospitals, religion and gestational age. Major factors for satisfaction with prenatal ultrasound were characteristics of hospitals, income and drinking during the pregnancy.

In conclusion, the respondent's perception of prenatal ultrasound is considerably low. More effective educational material or program with prenatal ultrasound information should be provided to pregnant women prior to prenatal ultrasound. New strategy such as process reengineering is recommendable to increase the satisfaction with prenatal ultrasound.

Key Words : attitude, knowledge, perception, pregnant women, prenatal ultrasound, satisfaction



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