

\* .      \*\* .      \*\*\* .      \*\*\*\* .      \*\*\*\*\*

20%

1. 가

1 , 2 ( , 1994),  
1980 1 12,000

( , 1992).

( , 1996).

(Henry et al., 1993).

가

(Goldman, et al., 1991; Jacobson & Cousins 1989).

(Harris, 1988).

5 50%가

( , 1996).

2 4% (Avery, et al., 1997; Doolye, et al., 1991; Green, et al., 1990).

가

가

, 가,

5

(Jacobson & Cousins 1989; Goldman,

---

\* 가  
\*\* 가  
\*\*\*  
\*\*\*\*  
\*\*\*\*\*

et al., 1991).

가 , 가 ( , 1996).

가 , 가

가 가

가 가

가 . Redman(1976)

가 가

가 , 가 ( , 1996).

가 100g (oral glucose tolerance test : GTT)

( , 1989; Redman, 1968).

(1992) 가 가

50g glucose 1  
140mg/dl National  
Diabetes Data Group(NDDG)  
GST(50g, 1hr glucose screening test)  
100g GTT  
24 28

2. NDDG 105mg/dl, 100g  
glucose 1, 2, 3 190mg/dl,  
165mg/dl, 145mg/dl 2

1) ( , 1996, 22).

2) 2 가

3) 2% ,  
8 가

가 ( , 1996).

(1996)  
2 3%

(Metzger, 1991).

Dooley (1991) 가

가 , 3 2 3 3

가 , 20% 가 ,

1 2 1 4 ,

20 가 ( 1996).

가 ,

가 ( , 1985).

가 ( , 1988).

가

가 가

가 (Redman, 1976). (1984)

가 - ,

가 가 가

가 ( , 1985).

가 (1985)

가가 ,

가 .

가 , 10 13kg

가 ,

(1975) 가 , Cronbach coefficient alpha 0.88 30 3 (' , ' ) 1 , ' 가 가 0 30 , 가 (Wang, 1984), 가 가 ( , 1989). 2) 가 17 , Cronbach coefficient alpha 0.94 20 5 (' , ' ) 20 Wang, 1994). 가 , 100 , 가 ( , 1993; , 1989; , 1992). 가 3. ( , 1986; , 1988; , 1999; , 1993; , 1975). , 1) 1998 9 1999 12 , , 4 2) SAS 1. t-test, ANOVA , ANOVA 4 Duncan test . Pearson correlation 248 coefficient s . 192 . 1. 2. 23 42 29.7 , 82.3% . 1) 72.8%가 , 58.9% , 200 70.1% 가 < 1>.

< 1 >

	N(%)	Mean ±SD	t or F	Mean ±SD	t or F
-29	96 (50.3)	14.0±6.7		84.5 ± 11.9	
30 -	95 (49.7)	16.2±6.0	-2.40*	85.2 ± 11.4	-0.42
	158 (82.3)	17.0±6.3		86.1 ± 10.8	
	34 (17.7)	12.5±5.8	4.99**	83.4 ± 12.6	1.55
	52 (27.2)	15.7±7.3		83.6 ± 13.4	
	139 (72.8)	14.9±6.1	0.78	85.5 ± 11.0	-1.00
	79 (41.1)	12.3±6.1		82.2 ± 12.3	
	113 (58.9)	17.0±6.0	-5.28**	86.9 ± 10.8	-2.78*
100	23 (16.8)	13.2±7.2		81.0± 13.4	
200	96 (70.1)	16.1±6.4	2.18	86.9±12.0a	3.99*
200	18 (13.1)	16.8±6.3		80.1± 9.3a	
Total	192 (100)	15.1±6.4		85.0 ± 11.6	

p<0.05\*, p<0.001\*\*

a ; 가 .

2. 가 , , 가 , 가 < 2>. 3 82.8% 가 , 52.5%가 . 60.1%가 , 73.1%가 2) , 88.5% 가 . 86.8%가 , 3.2%가 , 25.8% 70.0% 8 , 가 가 , 14.1% , (87.5%)', (87.0%)', ' 3. 가 (82.8%)', ' 1) (79.2%)', ' 가 (76.6%)', ' 15.1 가 (70.8%)', ' 가 (70.8%)', ' (p<0.05), (p<0.001), (p<0.001) 가 , 30 , (70.3%)' 가 . , 가 < 1>. , 가 ' (p<0.001), (p<0.001) (87.0%)' , 50%

< 2 > (N = 192)

	N (%)	Mean ±SD	t or F	Mean ±SD	t or F
1-13	9 ( 5.3)	12.3 ±6.6		80.8 ± 12.8	
14-27	20 (11.8)	15.3 ±5.9	0.88	83.3 ± 11.5	1.11
28-40	140 (82.8)	15.2 ±6.4		85.8 ± 11.6	
	93 (52.5)	15.1 ±6.4		85.5 ± 11.6	
	84 (47.5)	14.4 ±6.6	0.80	83.4 ± 11.8	1.20
	83 (60.1)	14.7 ±6.6		84.8 ± 12.4	
	55 (39.9)	14.6 ±6.0	0.05	84.6 ± 10.6	0.09
	98 (73.1)	14.6 ±6.6		84.9 ± 12.0	
	36 (26.9)	14.7 ±5.8	-0.05	85.9 ± 10.3	-0.46
	123 (88.5)	14.0 ±6.1		84.8 ± 11.8	
	16 (11.5)	18.6 ±6.8	-2.78*	86.4 ± 10.2	-0.53
	6 ( 3.2)	17.8 ±4.7		80.5 ± 14.5	
	164 (86.8)	15.1 ±6.3	0.53	85.4 ± 11.7	0.62
	19 (10.1)	15.2 ±8.0		83.8 ± 11.0	
가	49 (25.8)	17.8 ±6.7		84.2 ± 12.4	
	141 (74.2)	14.1 ±6.2	3.53**	85.1 ± 11.5	-0.47
	27 (14.1)	20.9 ±4.8		88.1 ± 11.3	
	164 (85.9)	14.1 ±6.2	5.47**	84.4 ± 11.7	1.54

p<0.05\*, p<0.001\*\*

16 (85.4%)', ' 85.0 .  
 (81.8%)', ' 가 (p<0.05), (p<0.05)  
 (79.7%)', ' 가 , 가  
 200 < 1>. 가  
 (78.6%)', ' 가 2) 가  
 (68.6%)', ' 가 (68.2%)', ' 가? (4.69 )',  
 (68.2%)' < 3>. 가? (4.61 )',  
 4. 가? 가? (4.53 )',  
 1) 가 가? (4.44 )', ' 가?

<Table 3>

(N = 192)

	N(%)	N(%)
1.	119 (62.0)	73 (38.0)
2.	168 (87.5)	24 (12.5)
3.	147 (76.6)	45 (23.4)
† 4.	92 (47.9)	100 (52.1)
5.	112 (58.3)	80 (41.7)
6.	136 (70.8)	56 (29.2)
7.	152 (79.2)	40 (20.8)
† 8.	60 (31.3)	132 (68.8)
† 9.	28 (14.6)	164 (85.4)
10.	167 (87.0)	25 (13.0)
11.	82 (42.7)	110 (57.3)
† 12.	136 (70.8)	56 (29.2)
13.	159 (82.8)	33 (17.2)
14.	120 (62.5)	72 (37.5)
15.	86 (44.8)	106 (55.2)
16.	115 (59.9)	77 (40.1)
† 17.	39 (20.3)	153 (79.7)
† 18.	41 (21.4)	151 (78.6)
† 19.	61 (31.8)	131 (68.2)
† 20.	90 (46.9)	102 (53.1)
21.	35 (18.2)	157 (81.8)
22.	84 (43.8)	108 (56.3)
† 23.	88 (45.8)	104 (54.2)
24.	63 (32.8)	129 (67.2)
25.	61 (31.8)	131 (68.2)
† 26.	106 (55.2)	86 (44.8)
27.	88 (45.8)	104 (54.2)
28.	105 (54.7)	87 (45.3)
† 29.	135 (70.3)	57 (29.7)
30.	25 (13.0)	167 (87.0)

† ; ' 가 .

(4.39 )', ' 가? (3.93 )'

가? (4.38 )', ' 가? (4.38 )' < 4>.

, 가 가 ' 5.

가? (3.61 )',

가? (3.74 )', ' .

<Table 4>

(N = 192)

				Mean ±SD
1	4.		가?	4.69±0.61
2	16.		가?	4.61±0.69
3	3.		가?	4.59±0.69
4	17.	가	가?	4.53±0.71
5	18.		가 가?	4.44±0.78
6	2.	가	가?	4.39±0.78
7	10.		가?	4.38±0.79
8	11.	가?		4.38±0.78
9	5.		가?	4.30±0.80
10	19.		가?	4.28±0.92
11	9.		가?	4.27±0.84
12	20.		가?	4.23±0.89
13	6.		가?	4.22±0.91
14	14.		가?	4.15±0.88
15	1.	가?		4.11±0.84
16	12.	가?		4.07±0.89
17	13.		가?	4.06±0.90
18	15.		가?	3.93±0.99
19	7.		가?	3.74±0.96
20	8.		가?	3.61±1.02

가 (r=0.11).

가 ( , 1998 ; , 1999 ; , 1999). (1999) 15.1 (100 50.3 ) , 20 30 가 , 가 , 가 가 88.5% ( , (123 ) , 1999). 가 (1980) , 73.1% ,



가  
가 가  
가 가 가 85.0  
가 가 ( , 1999), 66.5  
가 가 ( , 1996), 77.75 ( , 1999)  
가 가 가  
가 가 가 (1997) 가  
가 가  
가 200 200  
( , 1980; , 1985;  
, 1988; , 1993; , 1993). 100 200  
, (1999)  
20.9 (100 67.5 )  
가  
Ebbinghaus( , 가 가  
1983)  
(把持 : retention)  
가 가  
50.0%, 33.4%, 가 8.3%  
(1990)  
가  
2 2  
3 , 3 가 가 , 가 가  
가 가?  
가?  
가 ( , 1994),  
가 , (Lotgering, 1985;  
Jovanovic-Peterson et al., 1989; Bung, 1993)  
, 가 가

2.

1) 85.0

2) 200

가

3) 가 ,

1998 9 1999 12 4 가

248 30

20 , 50

192 SAS

가

1.

1) 15.1 (100 50.3 ) , (1986).

2) 30 , 29(6), 109 113.

가 (1993). \_\_\_\_\_

3) , 가 , 가 (1985).

가 , 9(1), 1 83.

4) (1989). \_\_\_\_\_ , 8(1), 53 64

가 (1999). \_\_\_\_\_

\_\_\_\_\_ . 가

(1999). \_\_\_\_\_

\_\_\_\_\_ . 가

(1998). \_\_\_\_\_ 가

\_\_\_\_\_ . 가

(1989). \_\_\_\_\_

- (1999). 가
- (1990). 가
- , 20(2), 181-184.  
(1988).
- , 18(3), 281-287.  
(1988).
- 가
- , 12(1), 79-88.  
(1999).
- , 13(1), 63~76.  
(1999).
- , 13(1), 72-87.  
(1996).
- 26(3), 21-24.  
(1985).
- , 9(1), 89-93.  
(1985).
- (1980).
- , 7(2), 338-347.  
(1992). 가. 3
- (1993).
- , 23(2),  
171-185.  
(1993).
- , 5(1), 44-55.  
(1992).
- , 25-29.  
(1994).
- : 21
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-Abstract-

Key words : Gestational diabetes mellitus,  
Knowledge, Learning needs

### The Knowledge and Learning Needs about Gestational Diabetes in Pregnant Women

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The purpose of this study was to provide the basic data for developing a program for effective education about GDM (Gestational Diabetes Mellitus) by investigating the knowledge and learning needs of pregnant women about GDM.

The subjects were 192 pregnant women who visited obstetrical clinics for prenatal care.

The data were collected from October, 1998 to December, 1999, using a 50-item questionnaire (knowledge ; 30 items, learning needs ; 20 items), and analyzed by SAS program for t-test, ANOVA, Duncan test, and Pearson correlation coefficients.

The results were as follows :

#### 1. The knowledge level about GDM

- 1) Pregnant women had very little knowledge (total means ; 15.1 of 30.0) about GDM.
- 2) Pregnant women more than 30 years old, pregnant women from Seoul, and pregnant women who had more than a bachelor's degree were more knowledgeable about GDM.

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- 3) Pregnant women who didn't experience spontaneous abortions, pregnant women who had DM(Diabetes Mellitus) patients in their families, and pregnant women who received education about DM were more knowledgeable about GDM.
- 4) Pregnant women knew very well that GDM women have more maternal and fetal complications than normal pregnant women. Although they were knowledgeable about the importance and ways of controlling blood glucose level, they knew very little about the causes, symptoms, or management of hypoglycemia.

## 2. The learning needs about GDM

- 1) Pregnant women had high learning needs (total means ; 85.0 of 100.0) about GDM.

- 2) The learning needs of pregnant women who had more than a bachelor's degree and pregnant women who earned less than two million won in monthly income were higher than that of other groups.
- 3) Pregnant women had high learning needs about the health of their baby and themselves, but their learning needs related to weight control and exercise-things that play important roles in controlling blood glucose level-were relatively low.

As a result of the above findings, a systemic and individualized program is required for pregnant women and GDM patients. In addition to that, further studies that investigate the effects of education and retention of learning obtained by education are required in the near future.