

43 , 86

가
가

. 4 2 “ ”

1995

28)

2. 연구 방법

1) 한국어판 AUDIT(이하 AUDIT-K) 및 한국어판 AUDIT-C(이하 AUDIT-C-K)의 제작

AUDIT

. AUDIT - C AUDIT 3

,
3 2 ,

2 , 2

가
가

3) 실시방법

2

AUDIT - K, AUDIT - C - K,

MAST - K, CAGE - K

가

AUDIT - K

가 가

1

4) 자료분석

(1)

AUDIT - K AUDIT - C - K (internal consistency) Cronbach alpha 가

86

7

Pearson

(test - retest reliability)

(2)

AUDIT - K AUDIT - C - K 가 (MAST - K, CAGE - K)

, AUDIT - K AUDIT - C - K

(concurrent validity)

Pearson r 가

(discriminant validity)

t - test

(3) (optimal cut - off)

AUDIT - K AUDIT - C - K (cut - off)

, kappa

가 가

Receiver

Operating Characteristic(ROC)

2) 비교측정도구

(1) MAST(MAST - K)

1971 Selzer⁹⁾가 25

“ ”

“ ”

가

23)

(2) CAGE(CAGE - K)

1974 Mayfield¹¹⁾ 4

MAST - K CAGE - K 가 ROC
 (Area Under Curve ; AUC)
 AUDIT - K AUDIT - C - K
 AUC가
 29-32)
 (4)
 SPSS Window version 9.0
 , ROC Curve AUC MedCalcR win -
 dow version 5.0
 p<0.05 p<0.01

결 과

1. 연구 대상의 사회 인구학적 특성

43 ,
 43 .
 , , 가
 (Table 1).

2. AUDIT-K 및 AUDIT-C-K의 신뢰도 검증

AUDIT - K AUDIT - C - K
 Cronbach alpha 0.92, 0.85 . AUDIT -
 K - (test - retest reliability)
 가 0.96(p<0.01) (Table 2).

3. AUDIT-K 및 AUDIT-C-K의 타당도 검증

1) MAST-K 및 CAGE-K와의 상관관계

AUDIT - K AUDIT - C - K MAST - K
 0.86, 0.60, CAGE - K
 0.80, 0.56 (p<0.01)
 (Table 2).

2) AUDIT-K, AUDIT-C-K, MAST-K, CAGE-K 평균 점수
 의 비교

AUDIT - K, AUDIT - C - K, MAST - K, CAGE - K
 (p<0.01)
 (Table 3).

4. 최적 절단점(cut-off)의 추정

AUDIT - K ,
 Table 4 Fig. 1 . Table 4 Fig. 1

Table 1. Sociodemographic characteristic of sample

Variable	Alcohol use disorder (n = 43)	Non alcohol use disorder (n = 43)	²	p-value
Age (years)			0.00	1.000
20 - 29	3 (7.0)	3 (7.0)		
30 - 39	22 (51.2)	22 (51.2)		
40 - 49	17 (39.5)	17 (39.5)		
50 - 59	1 (2.3)	1 (2.3)		
Marital status			2.07	0.356
Single	9 (20.9)	10 (23.3)		
Married	32 (74.4)	33 (76.7)		
Separated	2 (4.7)	-		
Education			0.44	0.802
6	1 (2.3)	1 (2.3)		
7 - 12	19 (44.2)	16 (37.2)		
13	23 (53.5)	26 (60.5)		

Table 2. Correlation coefficients among AUDIT-K, AUDIT-C-K, MAST-K, CAGE-K and AUDIT-K (retest)

	AUDIT-K	AUDIT-C-K	MAST-K	CAGE-K
AUDIT-C-K	0.830*			
MAST-K	0.858*	0.604*		
CAGE-K	0.795*	0.563*	0.801*	
AUDIT-K (retest)	0.964*	0.779*	0.884*	0.786*

* : p<0.01 in Pearson's correlation analysis
 AUDIT-K : Korean version of Alcohol Use Identification Test,
 AUDIT-C-K : Korean version of AUDIT Alcohol Consumption Questions,
 MAST-K : Korean version of Michigan Alcoholism Screening Test,
 CAGE-K : Korean version of CAGE

Table 3. Comparison of AUDIT-K, AUDIT-C-K, MAST-K, CAGE-K scores (meanSD) between ancohol use disorder and non alcohol use disorder

	Alcohol use disorder (n = 43)	Non alcohol use disorder (n = 43)	F-value
AUDIT-K	21.00 ± 8.36	7.05 ± 4.34	16.04*
AUDIT-C-K	9.84 ± 1.36	5.44 ± 2.57	17.85*
MAST-K	21.00 ± 13.92	3.53 ± 3.91	60.28*
CAGE-K	2.16 ± 1.48	0.58 ± 0.91	14.34*

SD : Standard deviation
 * : p<0.001 in one-way ANOVA

12 AUDIT - K
 , 0.84, 0.86
 0.70 . ROC
 12 , (positive predictive value)
 0.85 . ROC AUC AUD -
 IT - K가 0.944(=0.026) , MAST - K 0.928
 (=0.029) ,
 . CAGE - K 0.801(=0.049)
 가 (p<0.01)(Fig. 3).

Table 4. The values of accuracy indices according to various cut-off scores of AUDIT-K

Cut-off	SEN	SPE	PPV (%)	NPV (%)	Efficiency	AUC (±SE)	K
8	1.0	0.58	76.8	100	0.849	0.791 ± 0.051	0.58
9	1.0	0.70	77.8	96.9	0.849	0.849 ± 0.045	0.70
10	0.98	0.72	80.4	85.0	0.826	0.849 ± 0.045	0.70
11	0.86	0.79	85.7	84.1	0.849	0.826 ± 0.048	0.65
12*	0.84	0.86	85.0	80.4	0.826	0.849 ± 0.045	0.70
13	0.79	0.86	86.5	77.6	0.814	0.826 ± 0.048	0.65
14	0.74	0.88	94.1	78.8	0.845	0.814 ± 0.049	0.63
15	0.74	0.95	93.7	75.9	0.826	0.849 ± 0.045	0.70
16	0.70	0.95	96.7	75.0	0.826	0.826 ± 0.048	0.65

* : cut-off score recommended by this study

SEN : sensitivity, SPE : specificity, PPV : positive predictive value, NPV : negative predictive value, AUC : area under curve, K : kappa coefficient, SE : standard error

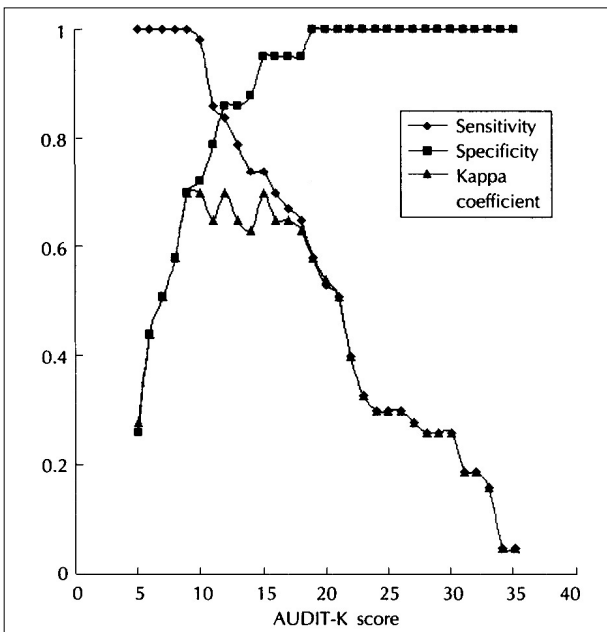


Fig. 1. Sensitivities, Specificities and Kappa coefficients of the AUDIT-K scores.

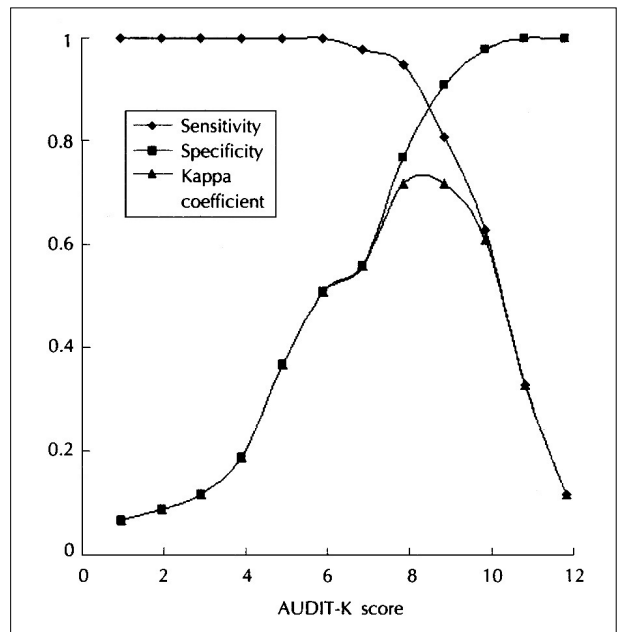


Fig. 2. Sensitivities, Specificities and Kappa coefficients of the AUDIT-C-K scores.

AUDIT - C - K

Table 5 Fig. 2 . Table 5 Fig. 2

8 AUDIT - C - K

0.95, 0.77

0.72 . ROC

8 , (positive predictive value)

0.90 . ROC AUC

AUDIT - C - K가 0.947(=0.021) , MAST - K

AUC 0.928(=0.029) ,

가 . CAGE - K 0.801

(=0.049) (p<0.01)

(Fig. 4).

고 찰

AUDIT AUDIT - C

가 , . 1

Pearson 가 0.96(p<0.01)

Cronbach alpha 가 0.8

Chronbach alpha 0.92 AU -

DIT - K가 가 가 92%, 가 93%, 10
 AUDIT - C - K Chronbach alpha 가 0.85 가 80%,
 가 가 가 93% .¹⁵⁾ Flemming V
 MAST - K DSM - 8
 CAGE - K Pearson 가 94%, 가 66%,
 AUDIT - K AUDIT - C - K 11 가 48%, 가 66%
 가
 (Table 2) 11 가 94%, 가 85%
 AUDIT - K AUDIT -
 C - K가 .¹⁸⁾ AUDIT - C - K
 (discriminant validity) 가 . 1987 Bush ²²⁾ 4
 WHO가 AUDIT
 11 ,¹³⁾
 8 ,¹²⁾
 8
 ROC 가 100% 가
 가 가

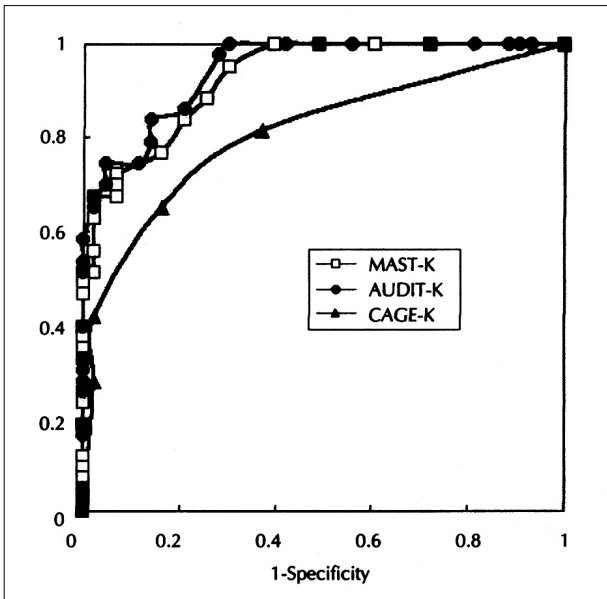


Fig. 3. Receiver operating curves of AUDIT-K, MAST-K and CAGE-K.

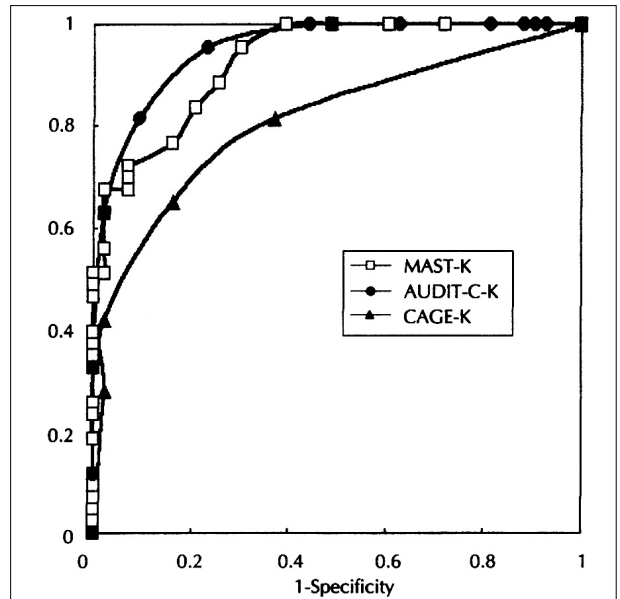


Fig. 4. Receiver operating curves of AUDIT-C-K, MAST-K and CAGE-K.

Table 5. The values of accuracy indices according to various cut-off scores of AUDIT-C-K

Cut-off	SEN	SPE	PPV (%)	NPV (%)	Efficiency	AUC (± SE)	K
5	1.0	0.37	67.2	100	0.756	0.686 ± 0.058	0.37
6	1.0	0.51	69.4	100	0.780	0.756 ± 0.054	0.51
7	0.98	0.56	80.4	94.3	0.860	0.779 ± 0.052	0.56
8*	0.95	0.77	89.7	83.0	0.860	0.860 ± 0.043	0.72
9	0.81	0.91	96.4	72.4	0.802	0.860 ± 0.043	0.72
10	0.63	0.98	100	59.7	0.663	0.802 ± 0.043	0.61
11	0.33	1.0	100	53.1	0.558	0.663 ± 0.059	0.33

* : cut-off score recommended by this study

SEN : sensitivity, SPE : specificity, PPV : positive predictive value, NPV : negative predictive value, AUC : area under curve, K : kappa coefficient, SE : standard error

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부 록

한국어 판 AUDIT(Alcohol Use Disorders Identification Test)
 (The Korean version of Alcohol Use Disorders Identification Test : AUDIT-K)

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1 2 3 1 4
2. ?
1 2 3 4 5 6
7-9 10
3. 1 4 ?
4. 1 가 ?
1
5. 1 ?
1
6. 1 가 ?
?
7. 1 ?
1
8. 1 ?
1
9. ?
, 1
10. 1 , 가 ?
1