

Pharmacists' perception on smoking treatment and anti-smoking counseling

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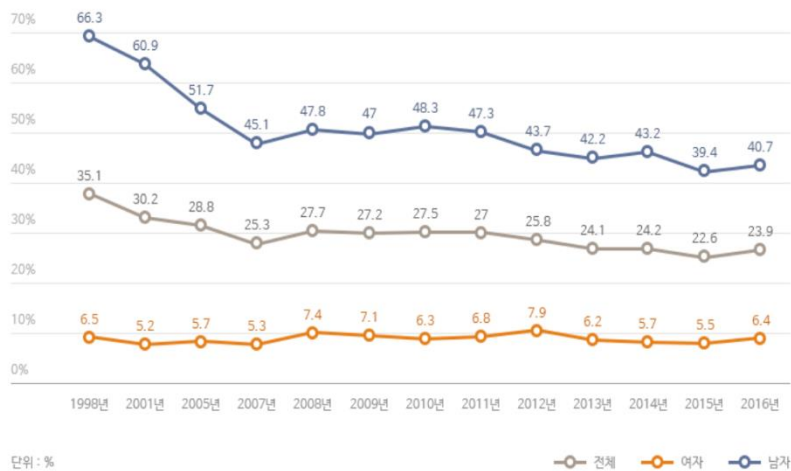
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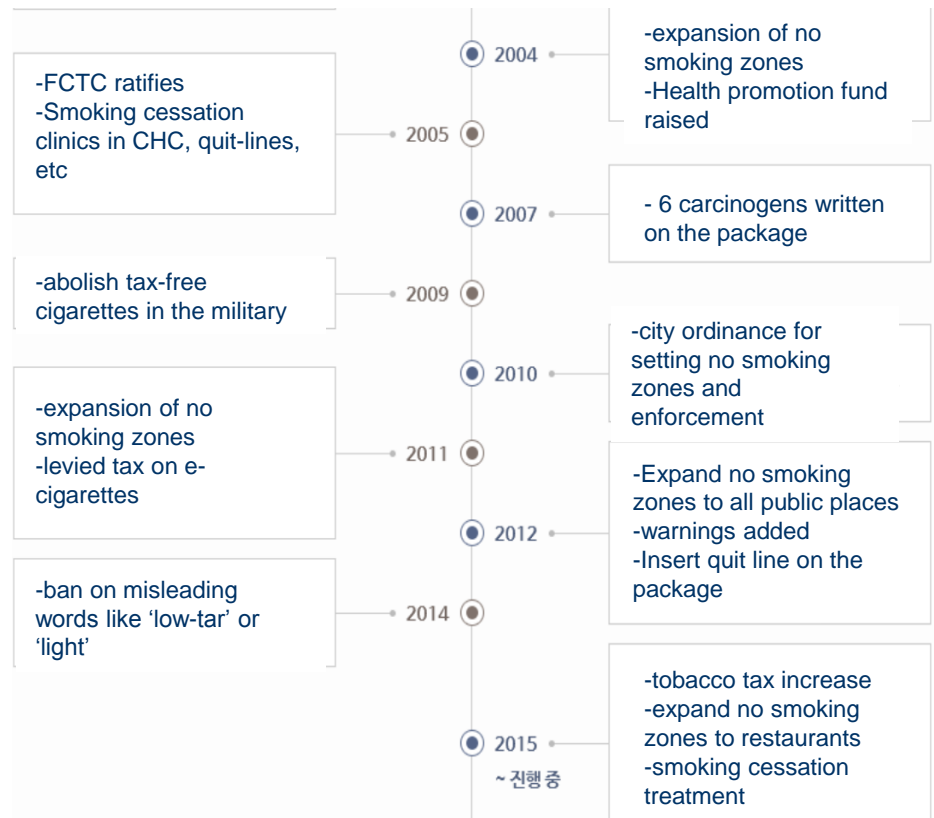
- Background and purpose
- Methods
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Background and purpose

The trend in current smoking rates and the national anti-smoking policies in Korea



Trend in current smoking rates



Major anti-smoking policies (2004~)

Source: <http://www.nosmokeguide.go.kr>

Background and purpose



1. The health insurance support program for anti-smoking treatment by the National Health Insurance Service (NHIS)

(1)

- Began in February, 2015
- Medical facilities prescribe smoking cessation treatment medicines or anti-smoking aids for 8~12 weeks
- Smokers can register for this program up to 3 times a year since 2017
- In each registration, beneficiaries can obtain up to six times of counseling and 4 weeks of prescription.
- For the first two counseling, beneficiaries pay 20% of out-of-pocket payment but no more out-of-pocket payments thereafter. Any payed out-of-pocket payments will be returned upon the completion of the program.

Background and purpose

Physician service and counseling (NHIS 80% support, out-of-pocket 20%)						
Category	Smoking cessation only			Smoking cessation concomitantly provided with other medical services		
	Total	NHIS	OOP	Total	NHIS	OOP
First visit	22,830	18,330	4,500	22,830	19,830	3,000
Follow-ups	14,290	11,590	2,700	14,290	12,490	1,000

- Medical Aid beneficiaries and low-income group (lower 20%) do not pay OOP.

Fees for pharmacy (dispensing, explaining the usage and other matters about medicines)						
Category	Smoking cessation treatment medicines			Smoking cessation aids		
	Total	NHIS	OOP	Total	NHIS	OOP
Pharmacy fees	8,100	6,500	1,600	2,000	1,600	400

- Medical Aid beneficiaries and low-income group (lower 20%) do not pay OOP.

Source: <http://www.nosmokeguide.go.kr/lay2/S1T53C349/contents.do>

Background and purpose

1. The health insurance support program for anti-smoking treatment by the NHIS (2)

- Contents of support and procedure of use

Contents of support

- ✓ Professional care and counselling of a doctor for 8~12 weeks
- ✓ Subsidies for medicines
- ✓ Out-of-pocket payment returns to those who complete the program (6 times of outpatient visits or 56 or longer days of prescription)

Procedure of use

outpatient visit → Registration for smoking cessation treatment program → physician service and counseling → prescription or counseling form for smoking cessation aids → pharmacy visit → Purchase of smoking cessation medicine or aids

Background and purpose

2. The roles of community pharmacies in anti-smoking counseling and smoking cessation treatment (1)

- Cost-effectiveness of anti-smoking services in pharmacy (ICER): cold turkey <nicotine patch<bupropion<nicotine gum

Table 2. Results of the Baseline Cost-Effectiveness Analysis

Strategy	Cost (\$)	Incremental Cost (\$)	Effect	Incremental-Effect	Average Cost-Effectiveness (\$) ^a	Incremental Cost-Effectiveness (\$)
No program	138	—	0.03	—	4597	—
Program						
Cold turkey	190	52	0.25	0.22	760	236
Nicotine patch	344	206	0.25	0.22	1376	936
Nicotine gum	409	271	0.25	0.22	1636	1232
Bupropion	391	253	0.25	0.22	1564	1150

^aAverage cost-effectiveness is the expected cost/quit.

출처: Tran et al.(2002). Modeling the cost-effectiveness of a smoking-cessation program in a community pharmacy practice. *Pharmacotherapy*;22(12):1623-31.

Background and purpose

- The roles of pharmacies in Korea are limited to dispensing medications
- The purpose of this study was to survey on the perceptions of the current anti-smoking counseling and smoking cessation treatment and to suggest how to expand the roles of community pharmacies

Methods

- **Development of the questionnaires**
 - Three authors in academia with backgrounds of public health or clinical pharmacy and three authors who are acting pharmacists developed the first draft
 - A pilot test was performed on 7 community pharmacists and the questionnaires were modified accordingly.

Methods

- Data collection
 - Period: June 5 ~ September 9, 2019
 - Survey method: On-line self-administered survey through googlesurvey
 - Invitation to participation: Through various SNS pharmacist communities (e.g., KPA board members, KPA community medicine safety center, Seoul PA, Daejeon PA, Jeonnam PA, Korea Society of Community Pharmacy, Pharmacists for Healthy Society, Alumni of School of Pharmacy in Dukseong Women's University, Neol Peom Pharmacy Assoc., etc)
 - 316 pharmacists participated in the survey

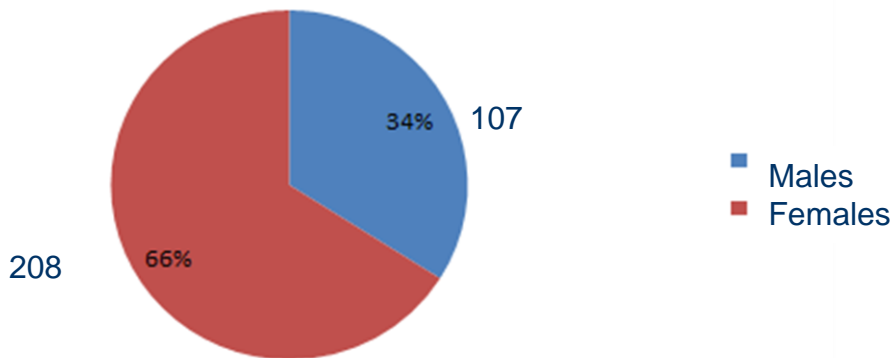
Methods

- Frequency analysis using Excel

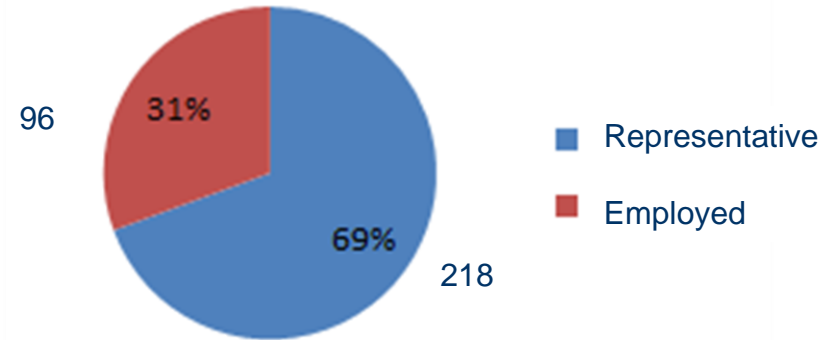
Results

1. Basic characteristics of the sample

Gender



Representative or employed



Age

Age	20's	30's	40's	50's	60's
N	20	89	73	108	26
%	6.3%	28.2%	23.1%	34.2%	8.2%

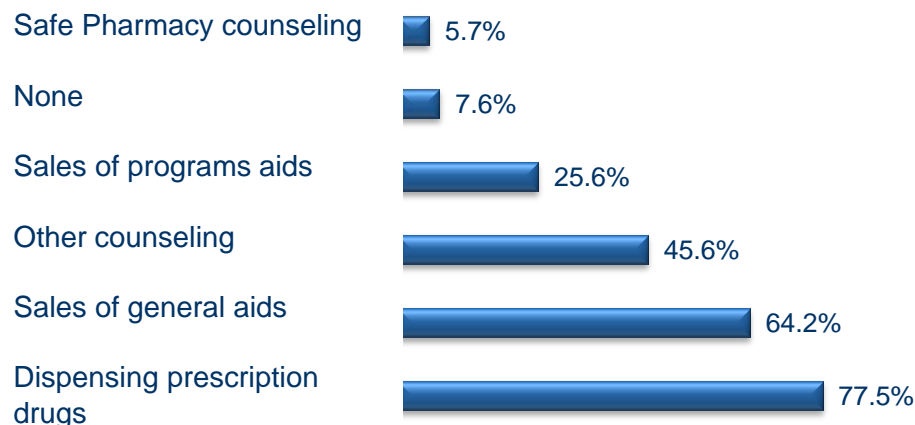
Types of pharmacy

Type	Dispensing pharmacy near hospital	Dispensing pharmacy near clinic	Sales pharmacy
N	44	226	45
%	14.0%	71.7%	14.3%

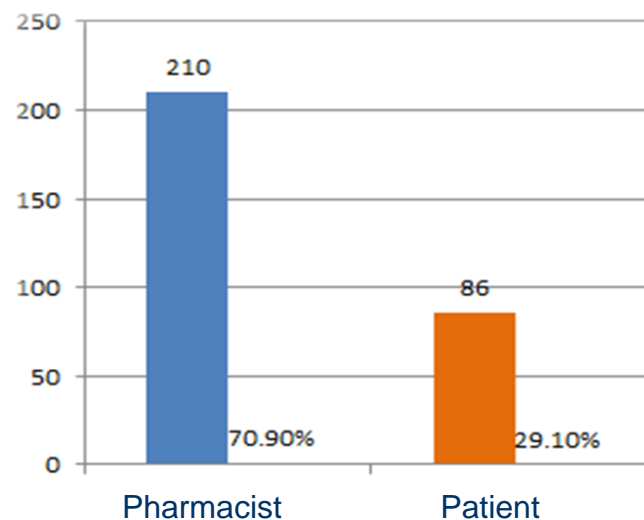
Results

2. Anti-smoking counseling activities in the past year (1)

Types of counseling activities (n=316)



Initiating person (n=296)



* Safe Pharmacy: Pharmacy-based health promotion program of Seoul Metropolitan City which provides comprehensive drug history management, smoking cessation counseling, and suicide risk gatekeeper service

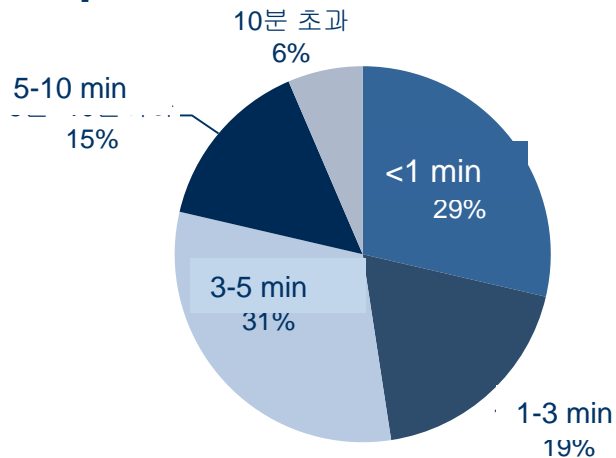
* Other autonomous anti-smoking counseling: suggestion of quitting smoking, motivation, or maintenance of quitting smoking

Results

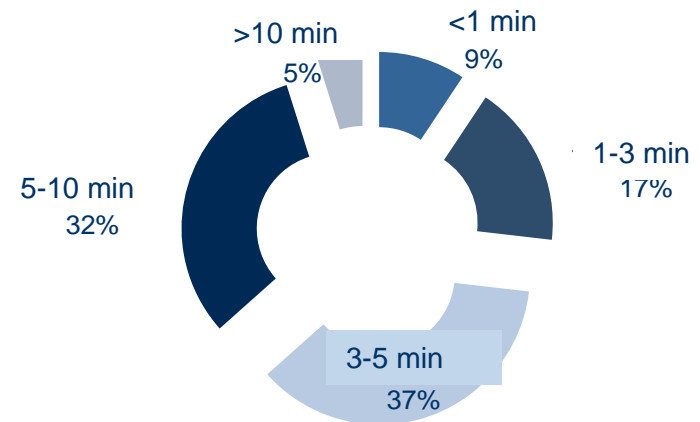
2. Anti-smoking counseling activities in the past year (2)

>10 min

Preparation time for counseling (n=248)



Duration of counseling (n=246)



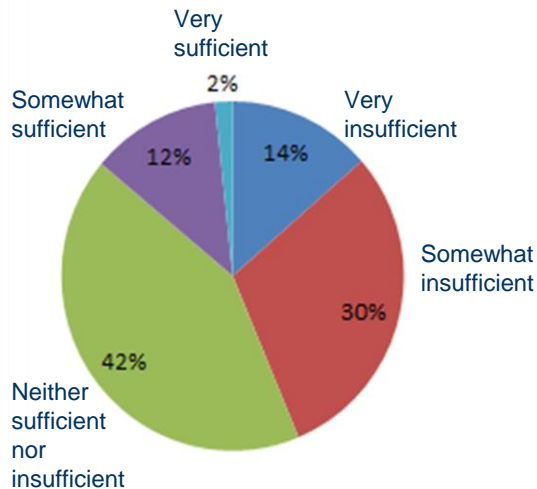
Time for data keeping

Don't record	<1 min	1~3 min	3~5 min	5~10 min	other	Total
40	34	46	69	32	3	224
17.9%	15.2%	20.5%	30.8%	14.3%	1.3%	100.0%

Results

3. Demands of education and training for anti-smoking counseling

Perceived competencies for anti-smoking counseling



(n=302)

1st Priority of education for anti-smoking counseling

	1 st priority (N)
1) Knowledge in the benefits of quitting smoking and the harms of smoking	109
2) Counseling skills to motivate those who do not have will to quit smoking	140
3) Counseling skills to help those who started quitting to maintain quitting	104
4) Knowledge in the usage of smoking cessation treatment medicines and their side effects	96
5) Skill to assess the level of nicotine dependency	48
6) Counseling skills to cope with withdrawal symptoms	91

Results

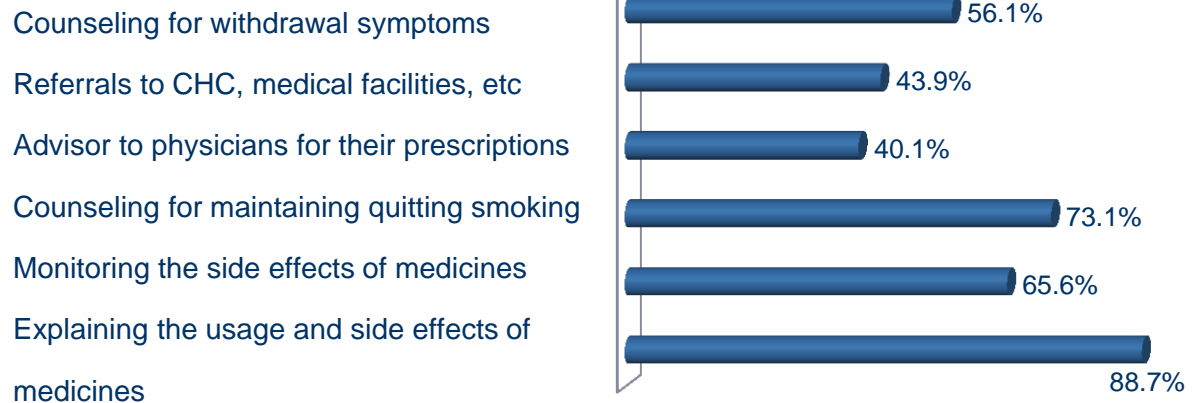
4. Perceptions on the NHIS support program for smoking cessation treatment (1)

Lifetime participation

	Yes	No
N	203	100
%	67	33

Perceived pharmacists' roles

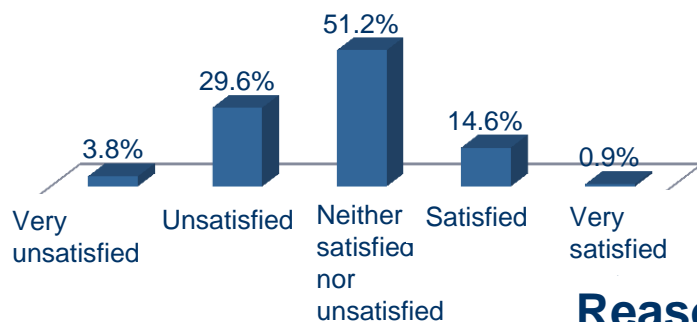
(Multiple response, n=212)



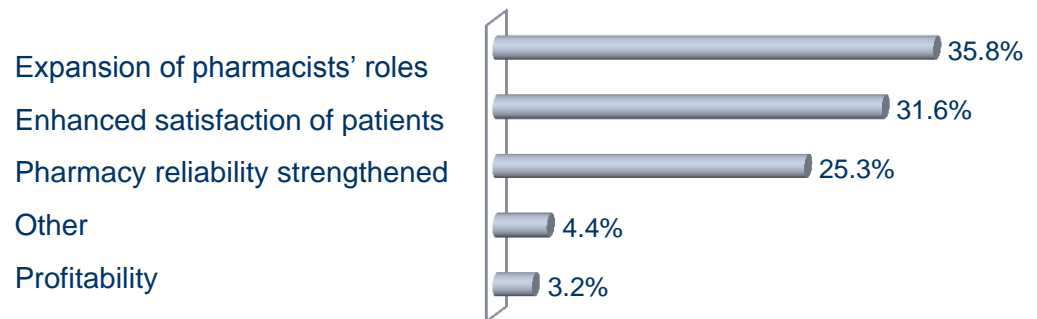
Results

4. Perceptions on the NHIS support program for smoking cessation treatment (2)

Satisfaction about the program (n=213)

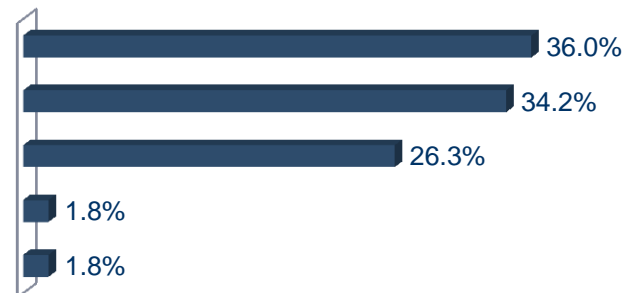


Reasons of satisfaction (n=95)



Reasons of dissatisfaction (n=114)

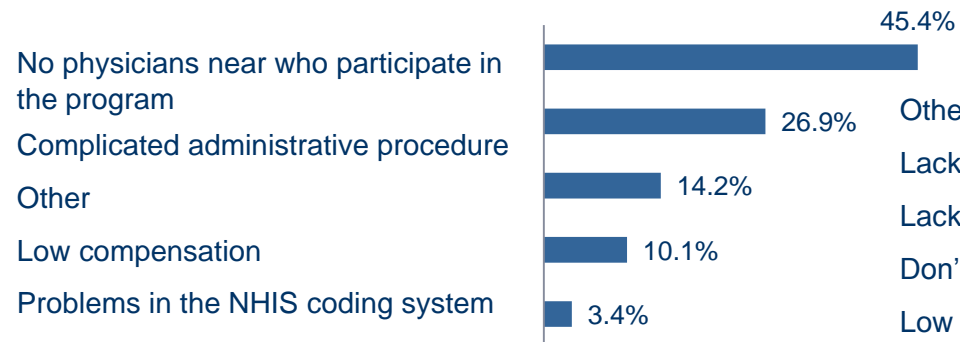
- Unacceptance of counseling initiated by a pharmacist
- Complexity of the coding system of NHIS
- Low compensation
- Other
- Too much time required



Results

5. Reasons of not providing anti-smoking services

Reasons of not participating in NHIS program (n=119)



* Other (n=17): 'don't know about the program' or 'No prescriptions from the clinics'

Reasons of not providing in any anti-smoking services (%) (n=100)



* Other (27): No inquiring customers, no opportunities, lack of time, smoking is a matter of personal decision

Discussion and conclusions

- Limitation of the sample
 - Considering the fact that about 20% of medical facilities participate in the NHIS program, 67% of participation rate in our sample is very high (not representative).
 - **Higher selection rate of active pharmacists**
 - **relatively more acceptable to innovations in pharmacy practice**

Discussion and conclusions

- Duration of anti-smoking counseling
 - 89% spend less than 5 min for preparation; 63% spend less than 5 min for counseling; 84.4% spend less than 5 min for record keeping
 - **In summary, less than 15 min in total is needed for each counseling**
 - **'lack of time' as the reason of not providing counseling is a minor opinion**
 - **However, two or more pharmacists are needed to provide both dispensing and counseling at the same time (reason of not doing counseling: 22% said 'lack of personnel')**

Discussion and conclusions

- Capacity building of pharmacists' anti-smoking counseling skills is necessary
 - 44% perceived lack of competence (only 14% satisfied in their competence)
 - High demands on training for counseling skills to motivate or maintain smoking cessation
- **NHIS provides on-line counseling education program only for physicians. Separate on-line counseling education program for pharmacists is needed.**

Discussion and conclusions

- Perceptions of pharmacists on the NHIS smoking cessation treatment program (1)
 - Apart from the traditional pharmacists' role of 'explaining the usage and the side effects'(88.7%), they perceive other roles, too, including 'counseling for maintaining quitting smoking'(73.1%), 'monitoring the side effects'(65.6%), 'counseling for withdrawal symptoms'(56.1%), 'referral to other service'(43.9%), and 'advising physicians about medicines'(40.1%).
 - **Among others, monitoring the side effects and advising physicians about medicines are high priorities for patient safety and continuous smoking cessation.**
 - **Physician-pharmacist collaboration system is necessary**

Discussion and conclusions

- Perceptions of pharmacists on the NHIS smoking cessation treatment program (2)
 - Higher dissatisfaction rate (33.4%) than satisfaction rate (25.5%)
 - The #1 reason of dissatisfaction was ‘Unacceptance of counseling initiated by a pharmacist’(36%), while the #1 reason of satisfaction was ‘expansion of pharmacists’ roles’(35.8%)
 - Need to accept program registrations from pharmacy
 - **Smokers of higher nicotine dependency should be referred to a clinic for treatment, but pharmacists should be able to provide smoking cessation counseling using nicotine replacement medicines to those of lower nicotine dependency.**