

# Inequities in Provision of Smoking Cessation Services and Organizational Support Among Different Types of Hospitals in Taiwan

## — A Nationwide Survey

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### Introduction

Smoking cessation service should be available to every patient who smokes. However, such services may not be equally delivered and supported across different types of hospitals.

### Method

We did a nationwide survey upon Taiwan's hospitals with a self-administered structured questionnaire. All medical centers (n=23), all regional hospitals (n=85) and 1/3 of district hospitals (n=141/423, selected by random sampling) were included. A representative was identified in each hospital in advance to fill in the questionnaire. The questionnaire was sent and returned during January to April in 2009. Key measures are: characteristics of the hospitals, availability and amount of cessation services in 2008, existence of 5A's delivery system, and organizational policy and support.

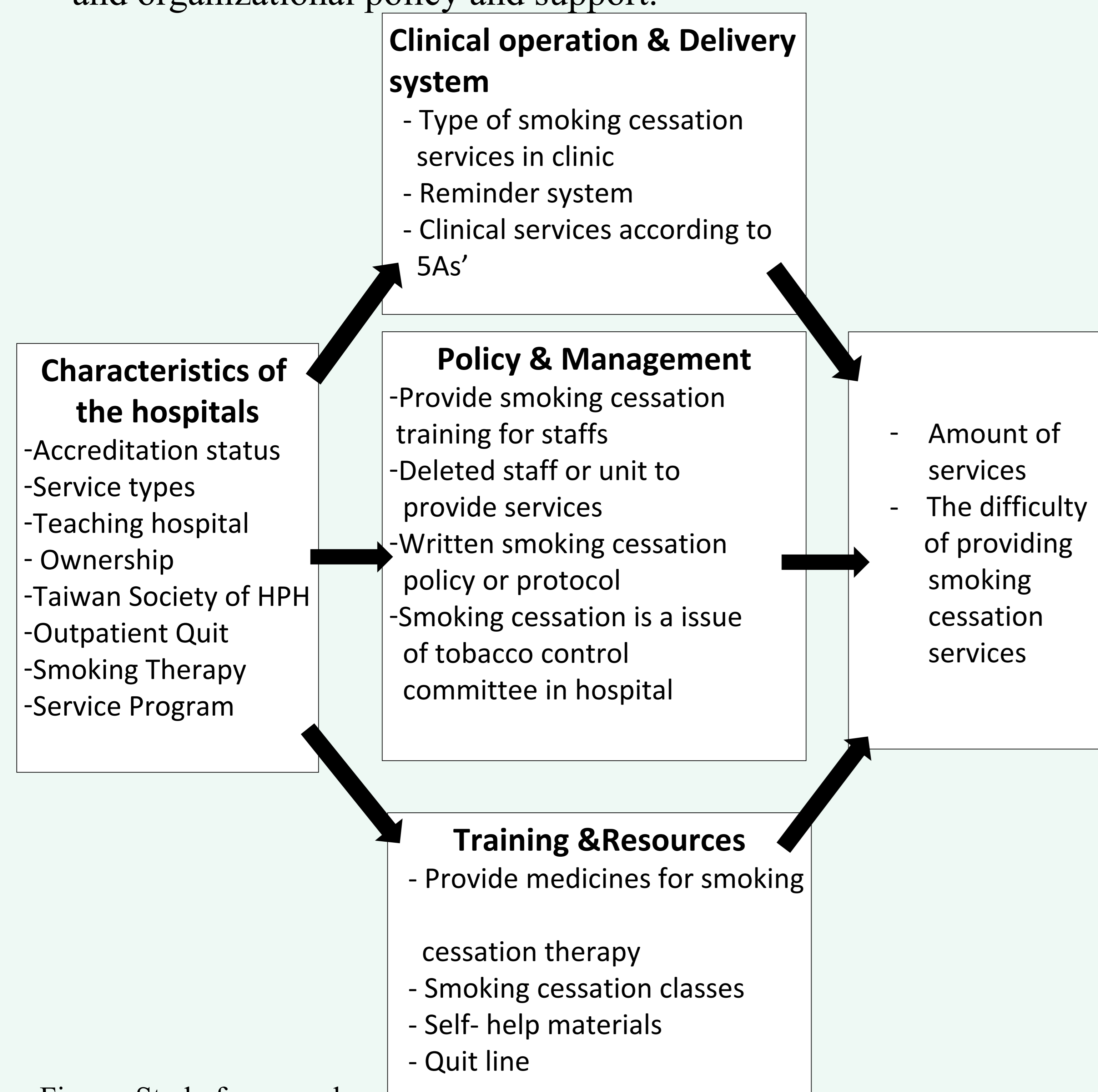


Figure: Study framework

### Conclusions

Among 3 types of hospitals in Taiwan, district hospitals have less available services and less organizational support for smoking cessation, although they are expected to play a more significant role in health promotion. This may aggravate health inequity for patients in rural areas without access to bigger hospitals and warrants governmental attention.

### Result

The response rate is 69.9% (174/249). A total of 72.9% of hospitals have contract with the Bureau of Health Promotion (BHP) to provide outpatient smoking cessation services. Compared with medical centers and regional hospitals, the district hospitals had significantly lower rates of: contracting with BHP, having a computerized reminding system, having various NRTs, actively distributing self-help materials, providing community outreach services, having a written policy on promotion of cessation services, having an assigned person for coordination, and having staff cessation programs.

Table 1. The available services and amounts of smoking cessation in hospitals of Outpatient Smoking Cessation Clinics of Bureau of Health Promotion (N=174)

Characteristics	Medical Centers	Regional Hospitals	District Hospital	Comparison of 3 levels hospitals P value	Standardized rate estimated for whole TW Mean (SD)
	Mean (SD)	Mean (SD)	Mean (SD)		
Accredited physicians of BHP	162 (14.4)	6.3 (4.2)	1.5 (1.8)	<0.001	2.9 (1.7)
Practice smoking cessation services physician(%)	45.6 (24.2)	60.0 (33.9)	62.9 (38.9)	0.249	61.7 (31.5)
Adjusted annual services per 1000 beds	170.7	141.7	255.9	0.600	233.9
No. of Smoking cessation clinics per week	13.8 (2.8)	12.5 (11.2)	8.6 (5.8)	0.093	9.4 (5.0)

Table 2. Characteristics of provision of clinical smoking cessation intervention in hospitals (N=174)

Characteristics	Medical Centers	Regional Hospitals	District Hospital	Comparison of 3 levels hospitals p- value	Standardized rate estimated for whole TW %
	N (%)	N (%)	N (%)		
Smoking status in clinical records in clinic				0.009	
Computerized reminder system	7 (43.8)	17 (20.2)	10 (11.1)		14.9
Paper- based record	6 (37.5)	25 (38.5)	36 (38.9)		38.8
None	3 (18.8)	23 (35.4)	45 (50.0)		
In the admission note, will regularly reminder clinician to ask and record patient's willingness to quit smoking	5 (31.3)	24 (39.3)	15 (16.9)	0.008	21.1

Table 3. The training, resources and policy of smoking cessation intervention in hospitals (N=174)

Characteristics	Medical Centers	Regional Hospitals	District Hospital	Comparison of 3 levels hospitals p- value	Standardized rate estimated for whole TW %
	N (%)	N (%)	N (%)		
Medicine					
Nicotine patch	(16) 100	61 (92.4)	49 (54.4)	<0.001	62.5
Chamoix	13 (81.3)	37 (56.1)	19 (21.1)	<0.001	29.3
Nicotine chewing gum	12 (75.0)	36 (54.5)	17 (18.9)	<0.001	27.0
Zyban	6 (37.5)	11 (16.7)	4 (4.4)	<0.001	7.8
Provision of self-help materials				0.001	
Usually actively	5 (31.3)	23 (34.8)	15 (17.2)		21.2
Very few	1 (6.3)	4 (6.1)	1 (1.1)		2.1
Occasionally	8 (50.0)	32 (48.5)	33 (37.9)		40.1
Seldom	2 (12.5)	5 (7.6)	23 (26.4)		22.8
Provide smoking cessation practice guideline to clinicians	5 (31.3)	32(50.8)	23 (25.8)	0.006	30.0
Have written smoking cessation policies or protocols				<0.001	
Yes	10 (62.5)	38 (60.3)	15 (17.6)		26.4
In progress	1 (6.3)	13 (20.6)	8 (9.4)		11.1
None	5 (31.3)	12 (19.0)	62 (72.9)		62.5
Community outreach services	3.88 ±2.0	3.27 ±2.2	1.20 ±1.7	<0.001	1.65 ±1.4