DEVELOPING AND VALIDATING A TOOL TO ASSESS EMPOWERMENT FOR TOBACCO CONTROL

Perera KMN¹, Guruge GND², Jayawardana PL¹

1 - Faculty of Medicine, University of Kelaniya; 2 - Health Promotion Division, Faculty of Applied Sciences, Rajarata University of Sri Lanka

Background

Methods

Tobacco, a major cause for morbidity and mortality, a product that kills 50% of its users, still remains a legal trade (WHO, 2013). With an industry infamous for its influences on policies and legislations, the need for community involvement in tobacco control is advocated globally (Gilmore et al, 2015). Empowerment (Box 1), is known to be associated with community involvement, both as a determinant, and, as an outcome (Zimmerman, 1985). Evaluating tobacco control interventions that aim to empower individuals is a challenge.

communities _{

Box 1: Empowerment

"the mechanism by which individuals, organizations and communities gain mastery over their lives"

(Rappaport, 1987)

Objective

To develop and validate a tool to measure empowerment for tobacco control

1. Developing the tool (Table 01)

Indicators were operationalized based on Zimmerman's psychological empowerment definition (Zimmerman, 1985). The interviewer-administered tool was developed using the methods in Table 01.

(Study Period: 2013 November – 2014 March)

2. Tool validation (Construct validity – Exploratory Factor Analysis)

Study design – Descriptive study **Study setting** – Badulla district

Study Population: Individuals aged 15-59 years **Sample size:** Item to participant ratio = 1:5 (N=180) **Sampling:** PHM areas – Random sampling (3 areas)

Households – cluster sampling **Data Collection :** Pre-trained data collectors

Data analysis: Delphi panel determined the factor structure based on communalities, Scree test, Eigenvalues and interpretability. Internal consistency and test-retest reliability were assessed using Cronbach's alpha and Cohen's kappa coefficient respectively.

Table 01: Steps in the tool development process with objectives

Steps	Objective	No. of Items
Preliminary tool		25
1. Delphi I		
Iteration 1	To select the items and to decide	27
	the wording and translation	
Iteration 2	To reach consensus on the items	27
2. Cognitive Interview		
	To improve wording to suit the local	27
	context and order of the questions	
3. Pretest		
	To improve wording and to assess	27
	feasibility factors	
4. Delphi II		
Iteration 3	a. To select items and name factors	27
	based on factor analysis results	
	b. To formulate the scoring scheme	

Results

Final tool = 27 items, 100 marks

Intrapersonal Domain (22 marks)

Perceived mastery and motivation to involve in tobacco control

- 1. Feel responsible to involve in tobacco control
- 2. Feel a need to help users quit tobacco
- 3. Feel a need to stop selling tobacco products to children
- 4. Feel a need to stop smoking in public places
- 5. Have skills to discuss tobacco with others
- 6. Have skills to discuss tobacco with policy makers
- 7. Have skills to work for tobacco control

Perceived competence to control tobacco within network

- 8. Can prevent family members from using tobacco products
- 9. Can prevent friends/peers from using tobacco products

Perceived competence to control tobacco in society

- 10. Can work to eliminate use of tobacco products
- 11. Can work effectively against activities of the tobacco industry

Interactional Domain (39 marks)

Perceived awareness regarding tobacco control

- 12. Aware: adverse effects of tobacco smoking
- 13. Aware: adverse effects of exposure to passive smoking
- 14. Aware: adverse effects chewing tobacco
- 15. Aware: effective ways to help a person to quit tobacco use
- 16. Aware: effective ways to prevent youth and children from initiating the use
- 17. Aware: rules and regulations to control tobacco in Sri Lanka
- 18. Can identify violations of above rules and regulations
- 19. Aware: promotion strategies used by the industry
- 20. Can identify promotion strategies in day-to-day settings

Perceived efficacy for tobacco control

- 21. Have skills to work in a team for tobacco control
- 22. Have skills to involve/lead others in tobacco control

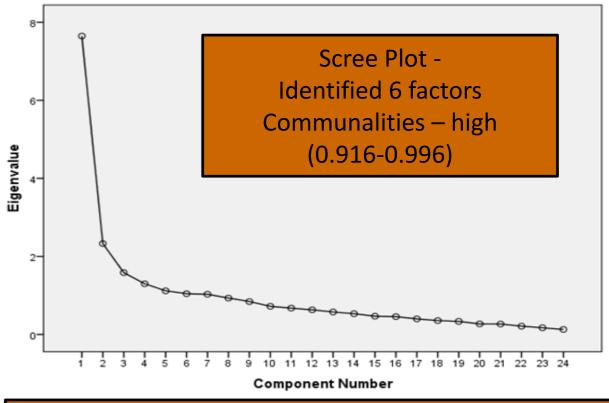
Awareness and mobilization of resources for tobacco control

- 23. Aware of the resources available in the community for tobacco control
- 24. Can use those resources for tobacco control

Behavioural Domain (39 marks)

Community involvement and organization participation for tobacco control

- 25. Part of a group/organization that has tobacco control in their agenda
- 26. Tried to convince family/friends/colleagues to be more concerned about tobacco related issues
- 27. Tried to convince policy makers/authorities to be
- more concerned about tobacco related issues



Internal consistency – Satisfactory
(Cronbach's Alpha value – 0.91)
Test-retest reliability – substantial agreement
Kohen's Kappa co-efficient – 0.63

Conclusion and Recommendations

Developed tool can be used in similar contexts to measure empowerment for tobacco control. If used in different contexts (cultural and sociopolitical) appropriateness and wording should be assessed, preferably via a Delphi technique and cognitive interviews as in the present study.

References

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