

International Union Against Tuberculosis and Lung Disease Health solutions for the poor

### Tobacco Cessation Interventions for Tuberculosis Patients

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## **Smoking and Tuberculosis**

- Smoking is a significant risk factor for TB, with an increased likelihood of infection, death, relapse after treatment and greater clinical severity.
- Smoking has been identified as an important factor for longer delays

Refrence:

- dos Santos Martinho A P S, Albuquerque Maria F P M, Ximenes Ricardo A A, et al. Risk factors for treatment delay in pulmonary tuberculosis in Recife, Brazil. BMC Public Health 2005; 5: 25.
- T. S. Bam, D. A. Enarson, S. G. Hinderaker, D. S. Bam. Longer delay in accessing treatment among current smokers with new sputum smear-positive tuberculosis in Nepal INT J TUBERC LUNG DIS 2012
- Basnet R, Hinderaker S G, Enarson D, Malla P, Morkve O. Delay in the diagnosis of tuberculosis in Nepal. BMC Public Health 2009; 9: 236.

## Tobacco cessation intervention among TB patients

### **Objectives**

 To share the outcomes and lessons learnt from implementing The Union's Guide Smoking cessation and smokefree environments for tuberculosis patients



## **The Union Working Group**

- The Union Lung Health Scientific Section established a working group in December 2009 to research a simple, cost-effective approach to smoking cessation for TB patients.
- This group's efforts led to the development of the ABC approach outlined in The Union guide Smoking Cessation and Smokefree Environments for Tuberculosis Patients published in 2010.
- The ABC (A=ask, B=brief advice, C=cessation support) approach was piloted in Bangladesh, China, India and Indonesia.





# ABC approach- Creating smoke-free environment for TB patients

- Creating a tobacco free health care services
- Applying ABC to identify smokers and smoking cessation for tuberculosis patients
- Promoting smoke-free home



## A case from Bogor City, Indonesia

### **Tobacco Cessation intervention in Indonesia**

- Piloted The Union Guide in 17 health centres
- ABC delivers systematically within DOTS routine program within 5-7 minutes
- Identified smoking behavior
  - Current smoker-
    - for zero month: has smoked in the last 3 months
    - for other months: has smoked in the last 2 weeks before the visit and has not made any quit attempt since the last visit
  - Relapsed has smoked in the last 2 weeks before the visit but has made at least one quit attempt
  - Quitter has not smoked at all in the last two weeks before the visit, not even a puff
  - Ex-smoker: has quitted smoking for the last 3 months or more

## **Creating a tobacco free health services**

- Developed and enforcing tobacco free policy
- Training to health work
- Ensure display of No Smoking signage



ABC training for health workers





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## **ABC: Ask: Identify smokers**

### at each visit, ask all patients if they currently smoke

### Month 0

- Do you smoke? Have you smoked at all- even a puff in the last three month
- Does anyone smoke inside your home?

### At all other visits

- Ask if they have smoked at all- even a puff in the last two weeks
- Does anyone smoke inside your home?





### ABC: Brief advice at each visit Personalized advice (e.g.) 5 to 10 minutes

- Quitting smoking now you can recover properly from TB
- As soon as quit smoking, your coughing and sputum will decrease

### **General advice (e.g.)**

- Smoking is very harmful for your health and family; it causes other disease such as cancer, heart disease
- To improve your health and your family's health, please do not allow anyone smoking inside







- Tell family, friends, and colleagues that they are quitting
- Remove smoking accessories • from home and work places
- Suggest patients to make smokefree home and avoid SHS
- Give patients leaflets, pamphlets

### **ABC:** Cessation support



HENTI MEROKOK SEKARANG

Setian Batann Ro

### **Recording and reporting**

- Identification of smoking among TB patients
- Identification of exposure to SHS inside the home
- Process of delivering the ABC



#### Kartu Berhenti Merokok ABC

Untuk pasien tuberculosis yang merokok dan terpapar asap rokok di rumah pada bulan ke 0

Nama: Puskesn Usia: Jenis Kelamin L 🗆 P 🗆				as Registrasi berhenti merokok no Registrasi TB No									
Pada awal perawatan TB, kemudian pada tiap pemeriksaan sputum / tiap kunjungan		ASK (Ajukan Pertanyaan)					advice in Saran gkat) - 1 menit	Cessation (Cipt dukungar mere 1 menit	n support takan n berhenti okok) - 3 menit	Tanyakan keluarga pasien apakah ybs telah berhenti merokok			
Bulan	Tanggal	Apakah anda merokok? * Y = Ya T = Tidak	Apakah anda merokok, walaupun Cuma satu hisapan, selama 2 minggu terakhir ? (bulan ke 1, 2,3, 4, 5, akhir) **	Berapa lama setelah bangun tidur anda merokok ? 1 = < 30 menit or, 2 = > 30 menit	Apakah ada yang merokok di dalam rumah anda ? Y = Ya T = Tidak	Pemberian saran kepada pasien Y = Ya T = Tidak	Komentar	Pemberian dukungan kepada pasien Y = Ya T = Tidak	Komentar )	Apakah ia (pasien) masih merokok walaupun cuma 1 hisapan, selama 2 minggu terakhir? Y = Ya T = Tidak			
0		Y							1				
1									5				
2			ħ										
3													
4		a state protocol											
5													
6 /Akhir													

Definisi status merokok

\*Untuk bulan 0, Y untuk merokok (dalam 3 bulan terakhir)

\* Untuk bulan 1,2, 3, 4, 5,6/ akhir, tulislah P, K, B, M, H :

P = Perokok : merokok selama 2 minggu terakhir sebelum kunjungan dan belum berusaha untuk berhenti sejak kunjungan terakhir ( usaha berhenti = pasien berusaha berhenti merokok dan berhasil selama paling tidak 24 jam )

K = Kambuh : merokok selama 2 minggu terakhir tetapi sebenarnya telah berusaha berhenti paling tidak 24 jam sejak kunjungan terakhir.

B = Berhenti: tidak merokok sama sekali selama 2 minggu terakhir sebelum kunjungan, bahkan walau cuma satu hisapan M = Meninggal;

H = Hilang Kontak: pasien tidak datang lagi.

Catatan : Jika pasien terdaftar setelah bulan 0, tariklah garis pada bulan ketika pasien tidak terdaftar

TB Disease: Pulmonary negative Pulmonary +ve

Baru 🗋 Kambuh 🗖 Pengot	atan s	etelah gagal	
Pengobatan setelah DO/ default Lain-lain 🔲		Pindahan	

<u>Menempelkan Tanda larangan merokok di rumah :</u> Ya 🔲 Tidak 🗋

### **Recording and reporting- ABC Register**



KARTU BERHENTI MEROKOK ABC Mencakup semua kasus yang terdaftar dengan Kartu berhenti merokok ABC Tahun : Waktu merokok Status terpapar rokok dalam Status merokok\* rumah\*\* pertama kali Umur Terdaftar Nama Jenis Kartu Tanggal (P, K, B, M, atau H) setelah bangun Kelamin (Y atau T) Berhenti TB no. Terdaftar tidur L/P Merokok  $1 = \le 30$  menit 4 5 end 5 end 0 1 2 3 2 3 4 1 no. 2 = > 30 menit ŵ

\* Pada tiap bulan, masukan huruf pada kolom 'apakah anda merokok?' pada kartu berhenti merokok ABC

\*\* Pada tlap bulan, masukan huruf yang tercantum pada bulan itu, pada kolom 'Apakah ada yang merokok di dalam rumah anda?' pada kartu berhenti merokok ABC

#### **ABC register- document outcomes**

### Inspection checklist to monitor tobacco free environment



Inspection Form Smoke Free Implementation Perda No. ....., Perwali No......Bogor City

#### Name of the institution:

2

Date of Visit

-				-	 
	-	-	-		
			OI	· •	
		-		-	 -

No.	Indicator		Ged. I		Ged. II		Ged. III		Ged. IV		1. V	Remarks (please mention name of the place such as lobby, waiting area, restaurant, bar, class room
												etc)
		Ya	Tidak	Ya	Tidak	Ya	Tidak	Ya	Tidak	Ya	Tidak	
1.	Found people smoking in indoor places											
2.	Found indoor designated smoking room/area											
3.	Found display of No smoking signage in every entrance/door of the building											
4.	Smelt tobacco smoke											
5.	Found ashtrays or matches in the indoor places of the building											
6.	Found cigarette butt in the indoor places of the building											
,	Found the items that indicate tobacco brands or tobacco company sponsorship, promotion and advertisement (e.g., napkins, coasters, poster, banner, bill backds, etc.)											
8.	Found selling cigarette in the premises (such as health, education, child care, sports, religious, government building and other buildings except mall, shop, restaurant, and hotels)											
Que	stions for managers:											
1.	Do you know that Bogor City has PERDA on smoke-free that prohibits indoor smoking in all places?					Yes			No			
2	Do you support and implement of smoke-free perda in your establishements?					Yes			No			
3	Do you know the perda must be implemented by the building manager?					Yes			No			]
4	Do you think is there any obstacle you face in implementing PERDA KTR?	What is	What is the possible solution that helps you to implement KTR perda									]
	1	1										
	2	2										
	3	3										
	4	4										]
	Potugas Pelaksana Penerima											
1.	с э					¢				)		

Name of the Inspector:

## **Result 1**

## Creating tobacco free health care



### Creating Tobacco free health services (n= 80 health facility (~350 buildings)



Compliance = zero smoking evidence and zero tobacco advertisement, promotion and sponsorship



## Result 2

## Applying ABC to identify smokers and smoking cessation



# Identifying smokers among new smear positive TB patients (Jan 2011 to December 2012): Do you smoke?





## Results of smoking cessation in Bogor 2011-2012 (n=582)



# Verification of quit smoking with family member/friend at 6 month

- Self reported quitters **410**/582
- Of the 410 quitters, 90% (369) of their family members were accessed to obtain smoking status by asking –
  - Has he/she smoked at all-even a puff in the last 2 weeks?
- Of the 369 quitters, 5.7% (21) were found still smokers as reported by family
- These 21 quitters were treated as relapsed in the analysis

## **Result 3**

## **Creating smokefree home**



Identifying exposure to secondhand smoke (SHS) Does anyone smoke inside your home?



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### Results of smoking cessation: Identifying exposure to SHS (n= 736) Does anyone smoke inside your home?





# Significant reduction of exposure to SHS at home



### Display of no smoking signage at home (n=750)





### **Lessons learnt from Bangladesh**

Proportion of TB patients who quit smoking at different months of TB treatment in a smoking cessation intervention programme in Bangladesh (May 2011-April 2012) N= 615



- A total of 3,134 tuberculosis patients were registered (May 2011 to April 2012)
- Of them, 615 (20%) were current smokers. The smokers were predominately male (99%) and had a mean age (range) of 38 (16-77) years.
- At the end of TB treatment, 151 (24.5% patients were lost to follow-up, relapsed or died

## **Lessons learnt from India**

- Patient enrolment was started in October – December 2010 in 2 districts Kamrup (Assam) and Vadodara (Gujarat).
- A total of 2879 TB patients were registered. Of them, 46.3% (1333) were any form of tobacco users and they were enrolled in the cessation intervention.
- At the end of 6 months, 67.3% remained quitters





## **Lessons learnt from China**



- In China, patient enrolment started from March 1 to August 31st in 2010 in 2 districts Ningdu and Xingguo.
- Among 801 TB patients registered, 233 were current smokers

## **Conclusion and Lesson learned**

- Brief advice in 5-10 minutes with minimum cessation support at every visit of TB patients resulted;
  - 59 to 72% quit rate of smoking among current smokers
  - 84% of TB patients made their home smoke-free
  - 100% tobacco free health care
- The issues of time constraints and overload of the health staff were raised before starting the intervention even during the training. But it was not found a major problem in real life
- Tobacco smoking increases the risk of developing TB, of delay in TB diagnosis, of poor treatment compliance and of relapse
  - Thus, smoking cessation intervention would enhance compliance of TB treatment, reduce risk of delay in TB diagnosis and treatment relapse.

## Recommendations

 Policy makers and public health personnel should consider addressing smoke-free environments and brief advice with cessation support as part of the tuberculosis control as well as the health system to reach larger population