

# Smoking Cessation Interventions in Low and Middle Income Countries: A Systematic Review

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# Why an interest in smoking cessation research in LMICs?



- 80% of the world's smokers live in LMICs
- Urgent need to assist current smokers to quit
- Challenges to smoking cessation abound
  - Lack of awareness by policy makers and public
  - Poor healthcare systems and lack of policies to promote cessation
  - Economic constraints
  - Huge numbers of smokers
- Only one systematic review of tobacco control interventions in LMICs, published in 2012
- **Need for research on scalable, affordable smoking cessation models in LMICs**

# Methods



## ➤ Inclusion criteria

P - All people smokers in LMICs

I - randomised or non-randomised smoking cessation intervention; behavioural support; pharmacotherapy; combination of both

C – Standard care/minimal intervention or other interventions/no control group

O - Abstinence or quit rates measured at-least at six months from the date of the start of the intervention; self-report or bio-chemically validated

Timeframe: 2000 to present

## ➤ Exclusion criteria

- Population level anti-tobacco awareness studies
- Studies with no smoking cessation intervention

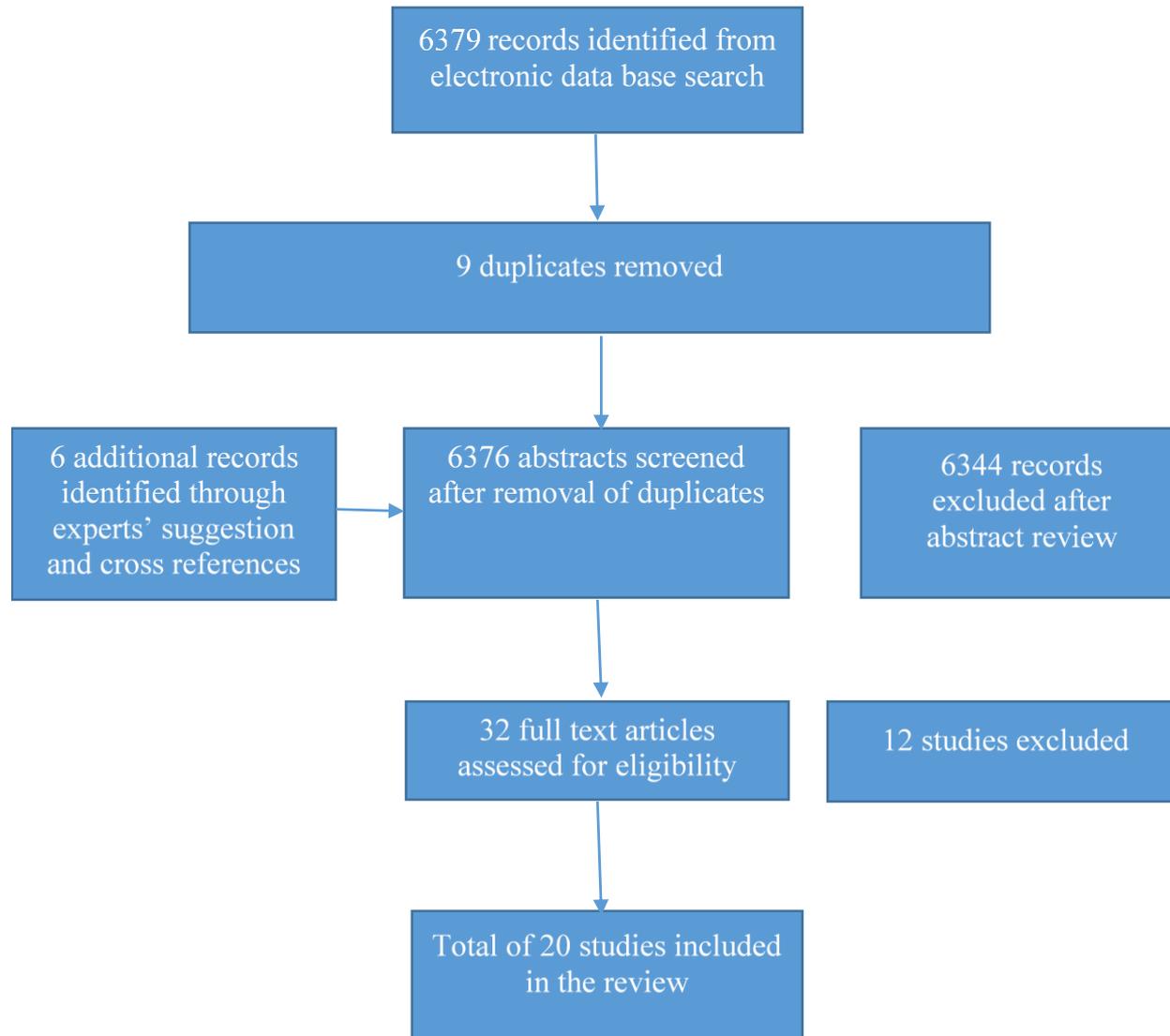
## ➤ Search Strategy

- Search terms
  - smoking cessation
  - primary care
  - primary health care
  - LMICs, developing countries ...

## ➤ Databases

- 'Cochrane Tobacco Addiction Group Specialised Register' of Cochrane Central
- Medline Ovid
- EMBASE
- PsychINFO
- Expert suggestions
- Cross references

: PRISMA Flow diagram



# Findings



## ➤ **General characteristics**

- Unequal geographic distribution – Asia
- Heterogeneous interventions
- Most pragmatic studies
- 15 exclusive smoking cessation studies
- 5 multicomponent life style interventions
- Only 3 included pharmacotherapy

## ➤ **Identification & recruitment of participants**

- Out-patient screening
- Community surveys
- Use of local organisations
- Mass media

## ➤ **Intervention strategies tested**

- Cessation support in general health clinics (2, Syria), TB (8) or diabetes (2) clinics
- Community based cessation support by lay health workers (3)
- Cessation support as part of a lifestyle intervention (5)

# Summary and conclusions



- Hospital based smoking cessation studies showed the highest difference in quit rates (78% intervention vs 9% controls)
  - Community based smoking cessation studies (40% vs 5%)
  - Multi-component life style interventions – reduction in proportion of tobacco users from 31% to 21%
  - Adding pharmacotherapy did not increase quit rates significantly.
- Paucity of studies in LMICs especially given burden of smoking and smoking-related illness in LMICs
  - More evidence needed on effectiveness and cost-effectiveness of scalable, appropriate smoking cessation intervention models
  - Hospital based interventions very effective but *reach* likely to be lower esp. to remote, rural communities
  - Community-based mobilisation and follow up should be explored
  - mHealth options also promising
  - Supportive tobacco control policy environment in LMICs is fundamental.