Helping India's frontline health workers improve tobacco cessation rates

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Role of Frontline Health Workers

• The term “frontline workers” describes health care workers that provide routine and essential services in a medical practice.

• They are often based in the community and come from the community they serve, they play a critical role in providing a local context for proven health solutions, and they connect families and communities to the health system. (Patel K, Nadel J, West M, 2014)

• Best Practice- Frontline health workers with a skilled birth attendance certificate were able to increase deliveries conducted from an average of 3.6 deliveries during October 2009-March 2010 to 17.7 in October 2010-March 2011 in India. (Kashyap A.)
Impact of Frontline Workers in Health Programmes

Since 2003—when Ethiopia made a commitment to invest in frontline health workers—death rates among Ethiopian infants, children and women have steadily declined. By the end of 2008, more than 30,000 of these new health extension workers had been trained and deployed to rural areas, doubling the size of Ethiopia’s health workforce in just five years.

Engagement of Frontline Workers in Health Programmes

• Right now, maternal care is one of the focuses of frontline health workers.  
  (James J, 2013)

• Counseling of families by frontline workers has lead to the number of women accepting PPIUCDs in a month increasing from an average of 29 to as many as 81.

• Training for frontline workers on interpersonal communication helped make home visits more effective—now they could make a strong case for taking advantage of the services, and they succeeded in improving attendance.  
  (Dywer S & Sharma G 2013)
Engagement of Frontline Workers in tobacco cessation

• Healthcare professionals play a critical role in reducing tobacco use through prevention programs. (Orisatoki 2013)

• They have a unique opportunity to offer health intervention such as smoking cessation to the population that would help them to stop smoking and its antecedent complications.

• A study conducted among pregnant Australian Indigenous women found that between 56 and 62 % of smokers considered advice and support from midwives, doctors or Aboriginal Health Workers likely to be helpful to quit. (Passey ME, Sanson-Fisher RW, Stirling JM 2014)
mHealth for Tobacco cessation

• In a single-blind, randomised trial, in the UK, smokers willing to make a quit attempt were randomly allocated, to a mobile phone text messaging smoking cessation programme (txt2stop)

• Biochemically verified continuous abstinence at 6 months was significantly increased in the txt2stop group (10.7% txt2stop vs 4.9% control, relative risk [RR] 2.20, 95% CI 1.80–2.68; p<0.0001).

  (Free C et al, 2011)

• The use of mHealth with frontline healthworkers has been successful with maternal and child health. Similar efforts can be made with tobacco cessation
Tobacco cessation guidelines

- The ABC pathway
- **Ask** about and document every person’s smoking status.
- **Give** Brief advice to stop to every person who smokes.
- Strongly encourage every person who smokes to use Cessation support (a combination of behavioural support and stop-smoking medicine works best) and offer to help them access it. Refer to, or provide, cessation support to everyone who accepts your offer.

*(The New Zealand Guidelines for Helping People to Stop Smoking, 2014)*
Types of Frontline Health Workers: India

- Medical Officer
- ANM Auxiliary Nurse Midwife
- Multipurpose Health Worker
- ASHA Accredited Social Health Activist (guided and trained by ANM)
- AWW Anganwadi Workers (assists ANM)
- Health Educator
- Health assistant

*Indian Public Health Standards (IPHS) Guidelines For primary Health centres, 2012*
How can we empower Frontline health workers to offer better services?

• Training on Health and nutrition issues and interpersonal communication skills
• Capacity Building of Frontline workers for Health promotion
• Smartphone based module training for Frontline Health workers

(Anchala R., Parrakad A., Nair S., 2012)

• Orient health workers on guidelines, facilitated joint planning, promoted data use, strengthened supervision, and enhanced community awareness

(Dwyer S., Sharma G., 2013)

• Clarify health workers’ roles and responsibilities and streamline supplies
Role of frontline health workers in tobacco cessation

- In a study in India, community health workers such as accredited social health activists had successfully assessed the tobacco status and nicotine dependence in rural population. 
  
  *(Jayakrishnan R et al 2012)*

- The overall FTND (Fagerstrom Test for Nicotine Dependence) score among current daily smokers was 5.04 (SD: 5.05).

- FTND scores in the control and intervention areas were 4.75 (SD: 2.57) and 4.92 (SD: 2.51) respectively.

- The FTND scores increased with age and decreased with higher literacy and socioeconomic status. The average FTND score was high among smokers using both bidi and cigarettes (mean 6.10, SD 2.17).
Engaging ANMs for tobacco cessation

- ANMs reported varying level of adherence to the 3As for tobacco cessation.

- All ANMs reported *asking* patients about tobacco use.

- This finding is promising as it suggests that ANMs recognize importance of asking patients about tobacco use.

- ANMs reported providing information on harmful health effects of tobacco pertaining to respiratory diseases and tuberculosis.
Gaps and Opportunities in engaging ANMs

- Information on adverse reproductive health outcomes was not provided.
- A small number of ANMs reported recommending smokeless tobacco as a substitute for smoking.
- It is important to enhance knowledge of ANMs who currently underestimate and understate the health risks of smokeless tobacco to be lower than they actually are.
- A study conducted found that nearly all ANMs (97%) reported routinely asking patients about their tobacco habits. More than two thirds of the ANMs asked their patients about tobacco initiation (89%) and frequency of tobacco usage (81%).  

## Knowledge of auxiliary nurse midwives about health effects of tobacco

<table>
<thead>
<tr>
<th>Medical Conditions</th>
<th>Smoking tobacco</th>
<th>Smokeless tobacco</th>
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<tbody>
<tr>
<td></td>
<td>GJ (%)</td>
<td>AP (%)</td>
</tr>
<tr>
<td>*Cough and respiratory diseases</td>
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<td>79</td>
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<tr>
<td>*Tuberculosis</td>
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<td>55</td>
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<tr>
<td>*Still birth</td>
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</tbody>
</table>

*P value <0.05. GJ: Gujarat, AP: Andhra Pradesh

*(Panda R., et al 2015)*
Role of frontline health workers in tobacco cessation

Counseling (assist) practices of auxiliary nurse midwives in tobacco control

Capacity building needs of ANMs on tobacco cessation

- The study also highlighted the state of training received by frontline health workers for tobacco control.
- A quarter of ANMs (26%) reported that they had been taught cessation approaches as part of their ANM curricular trainings.
- Only 16% of them reported having ever received any on-job training related to tobacco control.
- 68% ANMs stated that the lack of formal training was limiting their contribution to tobacco control efforts.
- 41% of respondents wanted to learn about cessation techniques, specifically behavior change techniques.

Predictors of tobacco control practices of frontline health workers

- ANMs who reported positive attitude toward counseling were 2.6 times more likely to provide information on health effects of tobacco
- ANMs who reported receiving training in tobacco control as part of their curriculum were 2.2 times more likely to provide information on health effects of tobacco as compared to those who reported not being trained in tobacco control.
- Those had received training in tobacco control were one and a half times more likely to give information on effects of tobacco on cough and respiratory diseases
- ASHAs who reported to receive training in tobacco control were 2 times more likely to provide information on adverse outcomes of pregnancy such as low birth weight baby and still birth than ASHAs who reported not having received training

Panda R, et al. 2015
• Another study looked at the knowledge levels, practices and attitudes of ASHAs about health effects of tobacco. (Persai D., 2015)
• Only one-third (36%) of ASHAs reported informing all patients about the harmful health effects of tobacco, whereas more than half (55%) reported providing information only to patients suffering from specific illness.
• About half of the AS and only one-fifth of ASHAs reported giving information on the ill effects of tobacco on heart diseases.
• Only 4% of ASHAs reported providing information on the effect of tobacco use on adverse reproductive health outcomes such as still birth, low birth weight baby and SIDS.
• Only 2% of ASHAs reported that they are providing information on respiratory diseases about the effect of tobacco and tuberculosis to their patients.
Constraints for frontline health workers in tobacco cessation

• The limited time available for each patient becomes a bottleneck in delivering counseling services in tobacco cessation.
• They need to be motivated to have a positive attitude toward tobacco control counseling.
• Nurses and midwives need to be trained in utilizing appropriate counseling skills if cessation rates are to continue to improve.
• Findings suggest that ASHAs do not regard women and adolescents vulnerable to tobacco use. This perception has to be changed.
Gaps

- Research has demonstrated that interventions that use Health Care Providers (HCPs) as tobacco control advocates were very effective.
- Simple advice from a HCP has been shown to increase abstinence rates significantly \( (\text{World Health Organization, 2005}) \)

- However, according to GATS data less than half of patients (43%) visiting the HCP in India were asked or advised about tobacco cessation.
- Another study has shown the majority of physicians related only respiratory problems and cancer (lung, throat & oral cancer) with smokeless tobacco. \( (\text{Panda R 2013}) \)
Gaps: Recording tobacco use in history taking

- The same study indicated that less than one-third (27%) of physicians reported that they record tobacco history of all patients, and less than half of physicians reported recording tobacco history selectively of patients suffering from respiratory diseases. Less than one-third of physicians did not take history (ask) of smokeless tobacco for patients suffering from CVDs and oral diseases. *(Panda R, 2013)*

- This gap needs to addressed, and history of tobacco use need to be stressed to frontline health workers.
Gaps

• In another study, only 17% of physicians demonstrated adequate preparation to provide tobacco cessation services at primary care health facilities (Panda R PK Jena 2013)

• The findings revealed minimal tobacco cessation training during formal medical education (21.3%) and on-the-job training (18.9%)

• Both the curriculum in medical school and on-the-job training require an addition of a learning component on tobacco cessation. The addition of this component will enable existing primary care facilities to deliver tobacco cessation services.

• There is a need to optimize engagement of frontline health workers in tobacco control and cessation efforts.
Connecting communities and health facilities for tobacco cessation

- **Enhance Knowledge**: There is limited information about knowledge, perceptions and practices pertaining to tobacco control among other health care providers such as nurses and midwives in India who have contact with pregnant women.

- **Enhance Demand**: ASHAs do home visits for health promotional activities and thus, are in ideal position to educate families about the harmful health effects of tobacco and SHS.

- **Enhance Skills**: Trained ANMs can provide tobacco cessation services through the primary health care system.

- **Enhance Facilities**: At the state level, tobacco cessation clinics in health care facilities have been established and capacity building of health care providers in tobacco cessation has been initiated (MoHFW, 2012).

- The 3As (i.e. ask, advice, and arrange) has been recommended as a practical tobacco treatment strategy.
Solutions

- Guidelines to engage frontline health workers in tobacco cessation
- Orient them to overall tobacco control module and specifically for tobacco cessation
- Need training modules for health workers on tobacco cessation
- Include tobacco cessation in their roles and responsibilities
- Technology based solutions to help them assess nicotine dependence and to undertake behavioural interventions
- Tobacco cessation to be highlighted as community outreach activity - VHSN days, WNTD etc to promote tobacco cessation
Conclusion

• There is an opportunity to substantially increase the reach of tobacco cessation services to rural, urban, low- and middle-income populations in India by mobilizing municipal primary healthcare workers.

• For tobacco counselling and cessation therapy to be accessible for large populations, need a critical number of well-trained front line workers who can provide the services.

• Tobacco control programs in India cannot be successful unless counselling and cessation therapy is accessible to a large number of people.

• The government in India needs to introduce tobacco cessation training for frontline workers and conduct a well designed training program for on-the-job training for currently working frontline health workers.
Thank you