Session D: One health in cities
– linking health and its determinants in urban environments

15\textsuperscript{th} and 16\textsuperscript{th} october 2019

Kêdôté Marius et al.

Citizen participation and social equity in a risk reduction intervention linked to air pollution in Abidjan, Cotonou, Dakar and Ouagadougou
Plan

1. Context of the Air-sain project
2. Adoption of an approach focusing on citizen participation and equity
3. Main achievements
4. Challenges related to the process of citizen participation and equity
1. Context (1/5)

Source: European Environment Agency, 2013
1. Context (2/5)

• Health consequences of AP (WHO, 2018)
  o Mortality: 1 million deaths annually in Africa among 7 million worldwide

• Socio-economic consequences (Schraunfage et al., 2019; World Bank and IHME, 2016; Degila and Yves, 2011)
  o Lack of universal coverage → 12% of income spent on medication
  o Informal sector: low productivity and high absenteeism rates due to illness
  o Inequalities and vulnerability of certain groups (women, children, exposed professionals, etc.)
Benin
1. Context (3/5)

- **Ecohealth Chair Project on Urban Air Pollution and its Impacts on NCDs (IDRC 2015-2020)**
  - OS 1 (research): Produce knowledge on urban AP levels and their impacts on NCDs in West AF
  - OS 2 (Training): Strengthen researchers’ capacity on the issue of air pollution
  - OS 3 (Action): Implement a participatory "AIR-SAIN" intervention aimed at changing practices through environmental education and the promotion of modern fuels
1. Context (4/5)

Geographical area of intervention
1. Context (5/5)

• The Ecohealth Chair contributes to environmental health through dialogue between science and society dialogue

• At the heart of the ecohealth approach is multidisciplinarity, participation and consideration of different types of knowledge (endogenous, scientific and practical)

  - Endogenous practices contribute to the preservation of the environment (e.g. sacred forests, organic agriculture, pharmacopoeia...
2. Citizen participation and equity (1/5)

- Citizen participation = mobilize populations to make decisions, manage their resources and control the activities that have an impact on their lives.
- Partnership with community leaders: Neighborhood leaders, counselors, female leaders, etc.
  - Collaborative workshop (understanding citizens' constraints and expectations)
  - Co-design of awareness session
- Broader community mobilization for the awareness-raising activity.
2. Citizen participation and equity (2/5)

Respirons sain pour mieux vivre

Nos habitudes qui polluent l’air dans nos logements et nous rendent malades

Utilisation de foyers traditionnels
La fumée du bois et du charbon est très dangereuse pour la santé, surtout à l’intérieur de la chambre

Brûlage de déchets à l’air libre
Cette pratique émet dans l’air de dangereux polluants

Utilisation de “mosquito”, d’encens et le fumage de cigarette
La fumée produite par l’utilisation de ces produits contient beaucoup de polluants

Utilisation d’insecticides
Le contenu des Insecticides est dangereux pour la santé

Problèmes de santé
La pollution de l’air contribue au développement de beaucoup de maladies qui nous tuent silencieusement :
Cancer des poumons, Asthme, Pneumonie, Maladies du cœur, Maladies de la peau, Stérilité masculine, Naissance prématurée

Réalisé avec l’appui financier du Centre de Recherche pour le Développement International
Projet CRDI 107347
Chaire Écosanté
Tél : +229 64 06 35 16 Site web: http://www.copes-aoc.org
2. Citizen participation and equity (3/5)

➢ Practice of equity in the planning and implementation of awareness-raising activities

• Selection of all socioeconomics groups
  - Meets the characteristics of equity

• Posters collage in health centers, door-to-door awareness raising, flyers sharing and one-on-one discussions in local languages with households with low levels of education
  - addresses the need for equality in access to education session (Pedrero, 1998)
2. Citizen participation and equity (4/5)

➢ Distribution of improved traditional stoves
  - To overcome the limits of awareness raising and to facilitate change in practice
  
  • Co-design of the recruitment strategy for stoves beneficiaries based on equity criteria (targeting the most socioeconomically disadvantaged groups)
  
  • Participation of government institutions, the Chair and beneficiaries in the purchase of stoves
  
  • Prioritization of vulnerable groups (pregnant women, wet nurse, the elderly) during distribution
2. Citizen participation and equity (5/5)
3. Main achievements (1/2)

• Strengthened knowledge of
  - Sources of indoor air pollution (burning incense, waste and plastic bags, smoke, outdoor air, paints, etc.)
  - health risks (respiratory NCDs, heart disease, male sterility, etc.)
• Strengthened practices on
  - fuels used, less burning of incense, waste, building ventilation, etc.
3. Main achievements (2/2)

Other changes
✓ Organization of awareness-raising sessions for men
✓ Raising awareness in the neighborhood for better practices
✓ Raising awareness among colleagues in the workplace for better practices
✓ Conducting health-promoting campaigns
4. challenges of citizen participation and equity (1/2)

Persistent inequalities

• It remains essential to invite community and religious leaders to awareness meetings (mostly men)

• However, men tend to sit in front, speak more often and louder;
  - they tend to stand up when they speak

• What to do with misconceptions? Difficulties with the concepts of causality and risk?
4. Challenge of citizen participation and equity (2/2)

- Difficult to define equity criteria for the distribution of improved traditional stoves
  - Initial strategy was to contact the Social Promotion Centers to determine the most disadvantaged households, but female leaders have changed the way participants are identified
  - It is a matter of dignity to identify the most disadvantaged
In conclusion

• Air-Sain has helped to strengthen citizens' capacities for better improved urban health
  - Participants open to learning
  - Modified practices
  - Community leaders are effective agents of dissemination

• Despite some significant social impacts, local populations must be involved in the development and implementation of interventions that affect them
For more information

THANKS