MANAGEMENT OF ACUTE RESPIRATORY INFECTIONS (ARI) by Community Health Workers (CHW) *SENEGALESE EXPERIENCE*

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INTRODUCTION

- SENEGAL: Infant mortality (139%0) is dominated by malaria, diarrhea diseases,malnutrition and ARI
- Surveys (Kédougou; Vélingara) showed that 80% of such deaths occur at home without contact with health facilities
- In Senegal CHW are allowed to manage malaria fever and diarrhoea *but NOT ANTIBIOTICS for ARI*

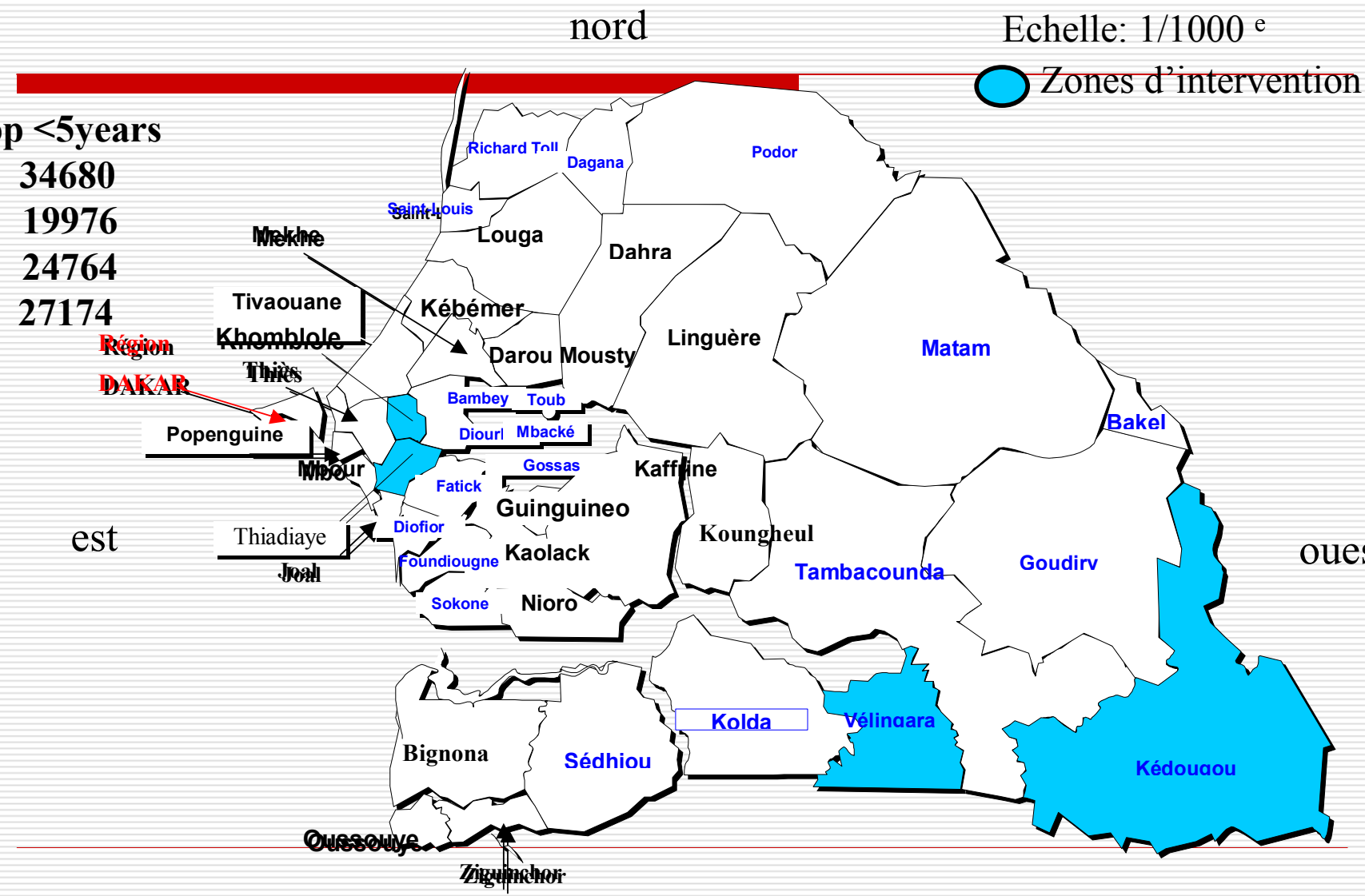
Why Senegal has adopted the intervention

- Political will to reduce mortality by increasing access and utilization of care
- Experience of successful implementation from Nepal with similarities to Senegal
- Evidence that antibiotics were found in some health huts and communities and dispensed by untrained people

MoH concerns that need to be adressed

- Can a CHW be trained to correctly manage and treat pneumonia?
- Can CHWs increase the number of traited ARI cases?
- Can misuse of antibiotics be prevented?

Set up : Four districts Khombole,Thiadiaye,Kedougou,velingara



MoH approach

- Creation of a steering committee of Key stakeholders led by the Director of Health including UNICEF, USAID, WHO, pharmacists and university to oversee the process
- Creation of a technical team lead including BASICS, UNICEF, the University of Dakar to lead the implementation
- Development of a protocol for implementation
- Detailed budget with funding sources identified

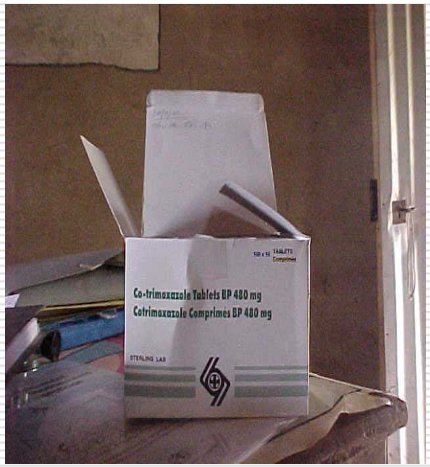
Main components of the intervention

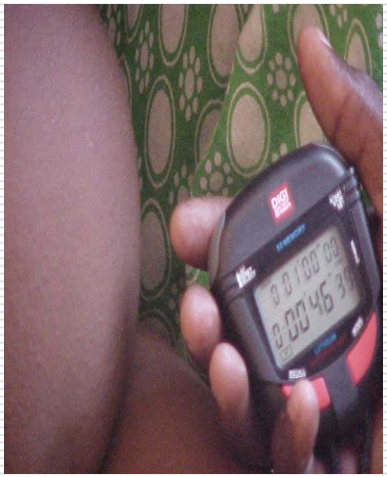
1. Orientation of MOH and partners staff at national, regional and district levels tailored to their roles in the intervention
2. Supply of cotrimoxazole, timers, registers and management tools
3. Training of literate CHWs (3 days, mostly practical) with WHO revised algorithm for ARI case management consistent with IMCI procedures
4. Community mobilization and education

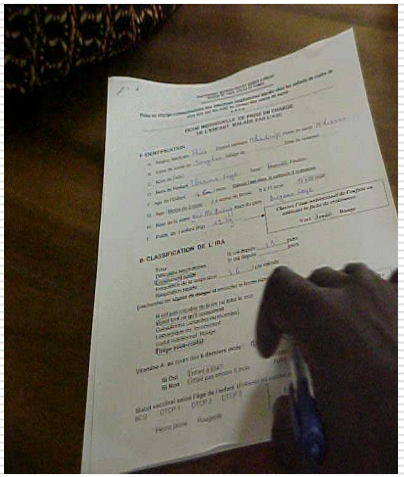
Main components of the intervention

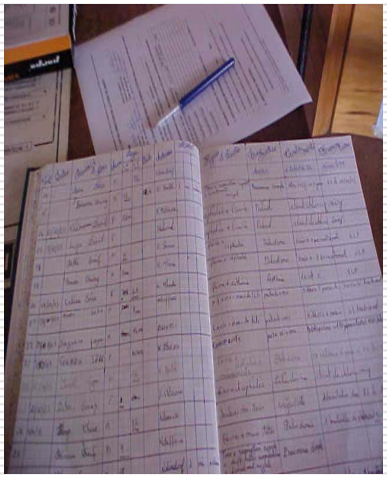
5. Post training support of CHWs
   a) monthly reinforcement sessions at the training site (health centers focused on practice and evaluation) later spaced
   b) quarterly supervision of all CHWs with interview of recent cases treated in homes
   c) monthly supervision by health posts
6. Data management and utilization
7. Evaluation

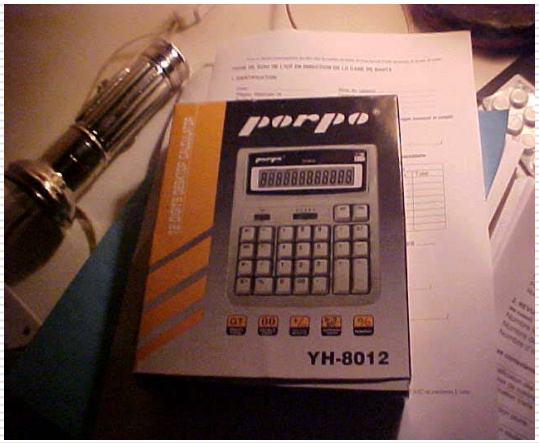
Materials used











Results : Training of CHWs

- 113 literate CHWs in 90 health huts trained in four districts (83 % health agents and 17 % trained birth attendants)
- Mean age was 35 years ± 9
- The majority of CHWs had primary education level (81 primary and 32 secondary)

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Results : Performance of CHWs

- Danger signs : 94%
- Respiratory rates cut-off points : 99%
- Assessment : 94%
- Classification : 91%
- Treatment : 91%

Results : drug and material management

- % health hut with cotrimoxazole stock out : 0 %
- % of stock cards up to date: 74%
- Tablets of cotrimoxazole misused: 555 out of 36,800 (1,5 %)
- % health hut with functional timer: 100 %

Results: Agreement between signs recorded, classification and case management

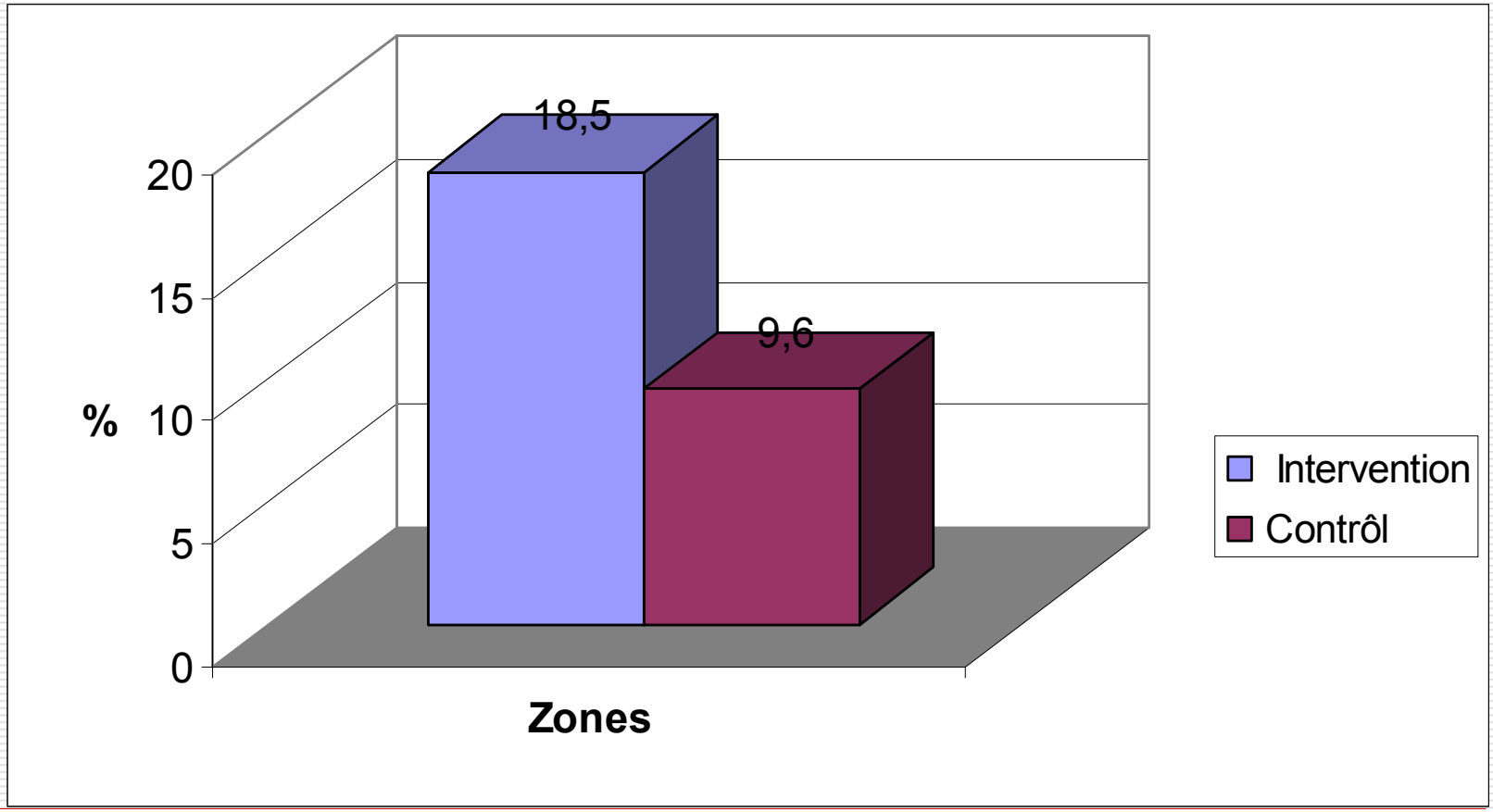
- Cases correctly classified
  - 89 % of the cases of cough/cold
  - 94,5 % of the cases of pneumonia
  - 64 % of cases of severe pneumonia
- Cases correctly managed
  - 80 % of cases of cough/cold
  - 96,8 % of cases of pneumonia
  - 69 % of cases of severe pneumonia

Results : Agreement dose/age

- 95 % of children 2-11 month received ½ tablet twice a day as indicated
- 75 % of children de 12-59 month received 1 tablet twice a day

Results : Proportion of ARI cases treated among children under five years in the intervention and control districts after one year.

Total number of ARI cases seen by CHWs : 3,727



Results: Follow up of cases at day3 or day4 and at day6

- Follow up on day3 or day4
  - 71 % of cases of cough/cold
  - 95 % of cases who received cotrimoxazole
  - 43 % of referred cases
- Follow up on day6
  - 54 % of cases of cough/cold
  - 92 % of cases who received cotrimoxazole
  - 16 % of referred cases
- Compliance to care
  - 80 % of followed referred cases complied with referral
  - 97 % of the cases treated with cotrimoxazole complied with duration and dosage

MOH concerns were addressed

- Trained volunteers with support from MOH and partners could correctly identify and treat pneumonia
- CHWs trained in ARI management contributed to a two fold increase in the proportion of pneumonia cases treated in intervention districts compared to control districts
- There was little misuse of cotrimoxazole; less than 1.5% for nearly 37,000 tablets used

Lessons learned

- *Importance of MOH leadership and ownership*
- *Inclusion of partners from the beginning*
- *Importance of monthly sessions at the training site to reinforce CHW skills and knowledge*

Challenges

- *Coordination between CHWs treating cases and health promoters*
- *Management of severe pneumonia (classification, referral, follow-up and compliance with referral)*
- *Regular supervision*

Next steps

- Expansion in 2O districts in 2005-2006
- Documentation of referral cases
- Operational research on drug resistance and side effects (pharmacovigilance)

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