**Appendix 1:** Search strategy syntax used for each database.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Database and search date/****Search strategy components** | Cochrane08/07/2009 | Pubmed29/06/2009 and 23/03/2010 | LILACS08/07/2009 | CINAHL13/07/2009 | Embase13/07/2009 | Google Scholar25/11/2009 |
| 1st Component:Terms derived from “Community Health Worker”(All linked by boolean OR)  | Community health workers  | "Community Health Aides"[Mesh] Community health aide\*Community health worker\* Village health worker\*Community worker\*Village worker\* Barefoot doctor\*Community health agent\*Health agent\* Health promoter\*  | Agente comunitário de saúde Agentes comunitários de saúde ACSAgente de saúde Agentes de saúde Agente comunitário Agentes comunitários Promotor de saludPromotor de saúde | (MH "Community Health Workers")

|  |
| --- |
| Community health worker\*   |
| Health promoter\*    |
| Barefoot doctor\*    |
| Lay health worker\*    |
| Village health worker\*    |
| Health aide\*    |
| Community health aide\*    |
| Health agent\*    |
| Community health agent\*    |
| Community worker\*    |
|  |
|  |

 | community health worker#.mp.health agent#.mp.community agent#.mp.lay health worker#.mp.community health aide#.mp.village health worker#.mp.village worker#.mp.barefoot doctor#.mp.health aide#.mp.health promoter#.mp.exp health auxiliary/ or health auxiliary.mp. | Community health workers Agentes comunitários de saúdeAgente comunitário de saúde |
| Boolean term linking 1st and 2nd components | ----- | AND | AND | AND | AND | ---- |
| 2nd Component:Terms derived from “Primary Health Care”(All linked by boolean OR) | **-----** | "Primary Health Care"[Mesh] Primary health care Primary care Community health | Atenção primária à saúde Saúde comunitária Atenção primária Atenção básica Atenção básica de saúde Cuidados primários de saúde Cuidados primários | (MH "Primary Health Care")  (MH "Health Education+")  (MH "Health Promotion+")Primary health careHealth education Health promotionCommunity healthCommunity carePrimary care | primary health care.mp. or exp primary health care/primary care.mp.community care.mp. or exp community care/community health.mp.health education.mp. or exp health education/health promotion.mp. or exp health promotion/ | **----** |
| Boolean term linking 1st/2nd and 3rd components | AND | AND | ---- | AND | AND | ---- |
| 3rd Component:Terms derived from “Brazil”(All linked by boolean OR) | Brazil | "Brazil"[Mesh]Brazil | **----** |

|  |
| --- |
|  (MH "Brazil”)    |
|  Brazil\*     |

 | Brazil.mp. or exp Brazil/Brazil#.mp. | Brazil |

**Appendix 2:** Effects of interventions by outcome with evidence level classification according to GRADE (A: high; B: moderate; C: low; and D: very low).

|  |
| --- |
| **Maternal and child health outcomes** |
| **Vitamin A supplementation** Summary of the evidence: **POSITIVE EFFECT (D)*** Positive effect:

***Cesar, 2005a*** Children 6 to 59 months visited by CHWs received vitamin A more frequently in the past 6 months compared with not visited (OR 1.89; 95%CI 1.21–2.95).* Null effect:

***Cesar 2005b*** No difference in frequency of vitamin A supplementation: 54.4% with the Pastoral vs. 52.8 % without the Pastoral (p = 0.79). |
| **Frequency of weighing children**  Summary of the evidence: **POSITIVE EFFECT (B)*** Positive effect:

***Cesar, 2005a*** Children < 2 years visited by CHWs weighed more frequently in past month compared with not visited(OR 4.27; 95%CI 2.79–6.54).***Cesar 2005b***  Children < 5 years followed by the Pastoral weighed more frequently in past month compared with not followed(78.3% vs. 62.3%; p<0.001). ***Neumann, 1999***  Children < 3 years followed by the Pastoral weighed more frequently in past 3 months compared with not followed (OR 2.94; 95%CI 1.66-5.23). ***Minayo, 1990*** Municipalities with CHWs had a 23% increase in the proportion of children weighed in past 3 months. |
| **Immunization coverage**  Summary of the evidence: **POSITIVE EFFECT (C)** * Positive effect:

***Cesar, 2005b***  Children < 5 years followed by the Pastoral had greater prevalence of complete basic immunization compared with not followed (89.8% vs. 82.2%; p<0.001).***Cesar, 2002***  Children < 5 years in the municipality with CHWs had greater immunization coverage compared with municipality without CHWs (89.3% vs. 75.7%; p<0.001). ***Neumann, 1999***  Children < 3 years followed by the Pastoral had greater probability of having complete immunization for their age compared with not followed (Adjusted OR 1.31; 95%CI 1.01-1.71).***Minayo, 1990***  In municipalities with CHWs there was greater increase in coverage for 3 doses of DTP (11.6% vs. 8.3%), measles (11.7% vs. 7.5%), and BCG (19.4% vs. 16.4%) compared with municipalities without CHWs.* Null effect:

***Cesar, 2005a***  No difference for children < 5 years visited and not visited by CHWs in terms of coverage of basic immunization scheme.\* |
| **Overall breastfeeding**  Summary of the evidence: **POSITIVE EFFECT (B)*** Positive effect:

***Coutinho, 2005*** Intervention with home visitors (combined with hospital-based intervention) improved prevalence of breastfeeding compared to hospital-based intervention only (mean aggregated prevalence for days 10-180 was 78% vs. 62%; p<0.001) ***Leite, 2005*** Intervention with lay counsellors increased practice of overall breastfeeding in 39% compared with control (RR 0.61; 95%CI 0.50-0.75).***Neumann, 1999***  Children < 3 years followed by the Pastoral had greater duration of overall breastfeeding compared with not followed (OR 2.23; 95%CI 1.13-4.40).***Svitone, 2000*** With introduction of PACS, proportion of children that never breastfed decreased from 14% to 6% in the period from 1987 to 1994; there was also increase in mean duration of breastfeeding (4 to 7 months).* Null effect:

***Cesar, 2005a***  No difference for children < 5 years visited and not visited by CHWs in terms of overall breastfeeding.\* |
| **Exclusive or predominant** **breastfeeding**  Summary of the evidence: **POSITIVE EFFECT (B)*** Positive effect:

***Coutinho, 2005*** Intervention with home visitors (combined with hospital-based intervention) improved prevalence of exclusive breastfeeding compared to hospital-based intervention only (mean aggregated prevalence for days 10-180 was 45% vs. 13%; p<0.001) ***Leite, 2005*** Prevalence of exclusive breastfeeding was greater in the group that received intervention with lay couselors compared with control(24.7% vs. 19.4%; p=0.044). NNT=17 for exclusive breastfeeding.***Neumann, 2002*** Pastoral was associated with increase in exclusive or predominant breastfeeding at 3 months:multilevel analysis (OR 4.63; 95%CI 3.25-6.59).* Null effect:

***Neumann, 1999*** No significant association between affiliation with the Pastoral and duration of exclusive breastfeeding (OR 0.55; 95%CI 0.07-4.27). |
| **Late introduction of bottle feeding** Summary of the evidence: **POSITIVE EFFECT (B)*** Positive effect:

***Coutinho, 2005*** Intervention with home visitors (combined with hospital-based intervention) delayed introduction of bottle feeding compared to hospital-based intervention only (65% vs. 90%; p<0.001) ***Leite, 2005*** Introduction of bottle feeding was lower with lay counsellors intervention compared with control (20.1% vs. 33.4%; p<0.001). NNT=7.***Neumann, 1999***  Children < 3 years followed by the Pastoral had less early introduction of bottle feeding compared with not followed (OR 0.49; 95%CI 0.27- 0.89). |
| **Use of Oral Rehydration Solution (ORS) in the last episode of diarrhea**  Summary of the evidence: **INCONCLUSIVE*** Positive effect:

***Cesar, 2002***  Children < 5 years in the municipality with CHWs used ORS more frequently compared with municipality without CHWs (85.7% vs. 69.6%; p=0.02).***Svitone, 2000*** Proportion of children receiving ORS in last episode of diarrhea increased from 23% to 52% with PACS coverage increase from 1987 to 1994. ***Minayo, 1990*** In municipalities with CHWs there was increase in ORS utilization compared with municipalities without CHWs (8.7% vs. 1.3%).***Nations, 1988*** After intervention with trained healers, there was increase of ORS use (at least once) (0 vs. 54.2%).* Null effect:

***Cesar 2005a*** No difference for children < 5 years visited and not visited by CHWs in terms of ORS use.\****Cesar 2005b***  No difference in ORS use in last 15 days: Pastoral 69.6% vs. without the Pastoral 70.4%; p=0.068.***Neumann, 1999***  No significant association between affiliation with the Pastoral and ORS use (OR 1.73; 95%CI 0.90-3.33). |
| **Maintenance of breastfeeding and food intake during diarrhea episodes**  Summary of the evidence: **INCONCLUSIVE*** Positive effect:

***Nations, 1988***  After intervention with trained healers, there was a 20.8% increase in proportion of mothers that believed it was important to maintain breastfeeding during diarrhea episodes(p < 0.001) and 18% reduction in proportion of mothers suspending milk or other foods during diarrhea episodes **(**p < 0.001).* Null effect:

***Neumann, 1999*** Children < 3 years followed by the Pastoral had greater probability of increasing fluid or maintaining food intake during diarrhea episode within last 2 weeks compared with not followed (Adjusted OR 0.99; 95%CI 0.46- 2.14). |
| **Diarrhea incidence in children**  Summary of the evidence: **NULL EFFECT (D)*** Null effect:

***Kirchoff, 1985*** Despite water contamination reduction in houses visited by CHWs, there was no reduction of gastrointestinal symptoms.\* |
| **Knowledge about ORS use for diarrhea in children**  Summary of the evidence: **POSITIVE EFFECT (D)*** Positive effect:

***Cesar, 2005a*** Mothers of children visited by CHWs knew more often about ORS preparation compared with not visited (Adjusted OR 1.9; 95%CI 1.1–3.4). ***Emond, 2002***  Mothers of children visited by CHWs knew more often about ORS use for diarrhea compared with not visited (p=0.001). ***Minayo, 1990*** In municipalities with CHWs, mothers knew more often about the function of a measure spoon compared with municipalities without CHWs (72.3% vs. 61%).***Nations, 1985*** After intervention with trained healers, there was an increase in the proportion of mothers that believed they should give ORS to children in case of diarrhea (84.2% to 93%; p<0.01) and that knew about ORS home preparation (2.9% to 71.2%; p<0.001).* Null effect:

***Cesar, 2005a*** No difference for recognition of a measure spoon by mothers of children < 5 years visited by CHWs and not visited.\****Neumann, 1999*** Mothers of children followed by the Pastoral knew about ORS use for diarrhea more often compared to not followed (Adjusted OR 1.29; 95%CI 0.94-1.76). |
| **Low birth weight**  Summary of the evidence: **NULL EFFECT (B)*** Null effect:

***Cesar, 2005a***  No difference between mothers of children < 5 years visited by CHWs and not visited.\* ***Cesar 2005b***  No difference (7.8% with the Pastoral vs. 8.5% without the Pastoral; p=0.65).***Cesar, 2002*** No statistical difference between municipalities with and without CHWs (10.9% vs.13.7% respectively; p=0.27). |
| **Stunting**  Summary of the evidence: **NULL EFFECT (C)*** Null effect:

***Cesar, 2005b***  No difference in stunting prevalence in children < 5 years: 16.6% with the Pastoral vs.14.6 % without the Pastoral (p = 0.073).***Cesar, 2002*** Non-significant difference(26.7% vs.24.2%) after introduction of CHWs.***Neumann, 2002***  Non-significant difference**(**-0,08 in Z Score for children followed by the Pastoral compared with control group in multilevel analysis (95%CI -0.27-0.11).* Negative effect:

***Cesar, 2002***  Municipality without CHWs had lower stunting prevalence compared with municipality with CHWs (19.8% vs. 24.3%; p=0.01), but there is no baseline. |
| **Children underweight**  Summary of the evidence : **NEGATIVE EFFECT (D)*** Negative effect:

***Cesar 2005b*** Children followed by the Pastoral were more often underweight compared with not followed (8.5% vs.7%; p=0.02). |
| **Hospital admissions in children < 5 years**  Summary of the evidence: **INCONCLUSIVE*** Positive effect:

***Cesar, 2002***  Municipality with CHWs had less hospital admissions compared with municipality without CHWs (3.2% vs. 10.8%; p<0.001). Within a municipality with CHWs, hospital admissions decreased from 13.1% to 2.2% after CHW introduction.* Null effect:

***Cesar, 2005a***  No difference for children < 5 years visited and not visited by CHWs in terms of hospital admission during last year. \****Cesar 2005b***  No difference in hospital admissions: 14.3% with the Pastoral vs. 13.2% without the Pastoral (p=0.548). |
| **Mortality in children < 5 years**  Summary of the evidence: **INCONCLUSIVE*** Positive effect:

***Cesar, 2002***  Within a municipality with CHWs, deaths decreased from 6 to 2 after CHW introduction. * Null effect:

***Cesar, 2005a***  No difference for children < 5 years visited and not visited by CHWs in terms of under 5 mortality in the home.\* |
| **Mortality in children < 1 year**  Summary of the evidence: **POSITIVE EFFECT (D)*** Positive effect:

***Svitone, 2000***  32% decrease (from 95 to 65/1000) in the state of Ceará from 1987 to 1990 (period of increase in PACS coverage), compared to a 10% reduction in Brazil in the same period. |
| **Neonatal mortality**  Summary of the evidence: **NULL EFFECT (D)*** Null effect:

***Svitone, 2000*** No improvement after PACS introduction.\* |
| **Mortality in children < 1 year due to diarrhea**  Summary of the evidence: **POSITIVE EFFECT (D)*** Positive effect:

***Svitone, 2000*** Infant mortality due to diarrhea decreased from 48% to 23% with increase in PACS coverage. |
|  **Prenatal care or number of prenatal visits**  Summary of the evidence: **POSITIVE EFFECT (D)*** Positive effect:

***Cesar, 2008*** Pregnant women followed by CHWs had adequate prenatal care more often than control group (RP 1.5; 95%CI 1.16-1.94).***Cesar, 2005b*** Mothers of children followed by the Pastoral had more prenatal visits compared with not followed (six or more visits – 45.2% vs. 38.2%; p=0.006).***Svitone, 2000*** Prevalence of prenatal care increased from 65% to 84% with increase in PACS coverage from 1984 to 1997. ***Minayo, 1990*** In municipalities with CHWs, more pregnant women had at least one prenatal visit compared with municipalities without CHWs (86.5% vs. 47.3%).* Null effect:

***Cesar, 2005a***  No difference for children < 5 years visited and not visited by CHWs in terms of number of prenatal visits.\* ***Neumann, 1999*** No difference for groups followed and not followed by the Pastoral.\* |
| **Tetanus immunization in pregnancy** Summary of the evidence: **INCONCLUSIVE*** Positive effect:

***Minayo, 1990***  In municipalities with CHWs, more pregnant women received 1 to 3 doses of anti-tetanus vaccine in current pregnancy compared with municipalities without CHWs (66.8% vs. 52.7%).* Null effect:

***Cesar, 2005a***  No difference for mothers of children < 5 years visited and not visited by CHWs in terms of tetanus immunization.\** Negative effect:

***Cesar, 2005b*** Mothers followed by the Pastoral had complete tetanus immunization less often (51.2% vs. 56.9%; p=0.048). |
| **Iron supplementation in pregnancy**  Summary of the evidence: **POSITIVE EFFECT (D)*** Positive effect:

***Cesar 2005b***  Mothers followed by the Pastoral received iron supplementation more often in pregnancy compared to not followed (84% vs. 78.4%; 0=0.01).***Minayo, 1990***  In municipalities with CHWs, more pregnant women received iron supplementation compared with municipalities without CHWs (73.1% vs.58.6%). |
| **Early initiation of prenatal care**  Summary of the evidence: **NULL EFFECT (D)*** Positive effect:

***Cesar, 2008***  Pregnant women followed by CHWs begun prenatal care earlier compared to not followed (60.9% vs. 43.8%).* Null effect:

 ***Cesar, 2005a*** Mothers visited by CHWs had same probability of having initiated prenatal care in 1st trimester compared with not visited (Adjusted OR 1.06;  95%CI 0.60-1.86).***Cesar, 2005b*** No difference in areas with or without the Pastoral (69.6% vs. 65.8% respectively; p=0.22). |
| **Institutional deliveries**  Summary of the evidence: **NULL EFFECT (D)*** Positive effect:

 ***Svitone, 2000*** Increased from 70% to 89% with increase in PACS coverage from 1984 to 1997.* Null effect:

***Cesar, 2005b***  No difference in areas with or without the Pastoral (81.0% vs. 79.8 % respectively; p = 0.547). |
| **Type of delivery (vaginal)**  Summary of the evidence: **NULL EFFECT (D)*** Null effect:

***Cesar, 2005b***  No difference in areas with or without the Pastoral (88.2% vs. 85.4 % respectively; p = 0.112). |
| **Postnatal visit**  Summary of the evidence: **INCONCLUSIVE*** Positive effect:

***Minayo, 1990***  In municipalities with CHWs, more women came to visit right after delivery compared with municipalities without CHWs (33.3% vs. 12.4%).* Null effect:

***Cesar, 2005b***  No difference in areas with or without the Pastoral.\* |
| **Ultrasound imaging in pregnancy†**  Summary of the evidence: **INCONCLUSIVE*** Positive effect:

 ***Cesar, 2005a*** Mothers visited by CHWs had an ultrasound more often compared with not visited (OR 1.8; 95%CI 1.1–3.0).* Null effect:

***Cesar, 2005b***  No difference in areas with or without the Pastoral (41.5% vs. 46.3%; p=0.089). |
|  **Mothers knowledge about common child diseases**  Summary of the evidence: **NULL EFFECT (C)*** Null effect:

***Cesar, 2005a***  No difference between mothers visited and not visited by CHWs for recognition of signs of disease in children.\* |
| **Outcomes related to non-communicable chronic diseases** |
| **Oral health (oral hygiene)**  Summary of the evidence: **POSITIVE EFFECT (D)*** Positive effect:

***Frazão, 2009*** Frequency of teeth brushing (2 or more times a day) increased from 77% to 90% and use of dental floss (once a day) increased from 22% to 27% with CHW intervention. |
| **Improved access and regular use of oral health service**  Summary of the evidence: **POSITIVE EFFECT (D)*** Positive effect:

***Frazão, 2009*** Access to oral health service was easier for women after CHW intervention (easy and very easy access categories increased from 13.2% to 52.8%; and use was more regular (frequent and very frequent categories increased from 25.3% to 57.2%). Score for access to dentist rose for women (from -44.5 to 13.5; p<0.001), as did score for use of dentistry service (from -34.5 to 12.0; p<0.001). |
| **Knowledge about oral health**  Summary of the evidence: **POSITIVE EFFECT (D)*** Positive effect:

***Frazão, 2009*** Mean of correct answers among women increased from 7.62 ±0.56 to 10.89 ±0.39 (p<0.001). |
| **Adherence to cervical cancer screening test‡**  Summary of the evidence: **POSITIVE EFFECT (D)*** Positive effect:

***Mauad, 2009*** After introduction of a package of interventions, 43.7% of women that showed up for screening reported being referred by CHWs.***Minayo, 1990***  In municipalities with CHWs, more women adhered to screening compared with municipalities without CHWs(33.5% vs. 21.6% respectively) |
| **Adherence to breast cancer screening test ‡** Summary of the evidence: **POSITIVE EFFECT (D)*** Positive effect:

***Mauad, 2009***  After introduction of a package of interventions, 47.4 % of women that showed up for screening reported being referred by CHWs.  |
| **Hospital admissions due to circulatory conditions**  Summary of the evidence: **POSITIVE EFFECT (D)*** Positive effect:

***Guanais, 2009*** 4.3% decrease in hospital admissions for circulatory conditions in women, controlled for potential counfounders, associated with increase in PSF and PACS coverage from 1998 to 2002.* Null effect:

***Guanais, 2009*** Null effect in men. |
| **Identification of dementia**  Summary of the evidence: **POSITIVE EFFECT (D)*** Positive effect:

***Ramos-Cerqueira, 2005*** 85 cases identified by CHWs – 45 confirmed by specialists. Positive predictive value was 62.5%. |
| **High blood pressure detection**  Summary of the evidence: **POSITIVE EFFECT (D)*** Positive effect:

***Targa, 2006*** After 2 years of CHW intervention, the number of people ≥ 40 years with high blood pressure diagnosed in one primary care health facility increased from 9.1 to 31.8%. |
| **Outcomes related to infectious diseases** |
| **Malaria prevalence**  Summary of the evidence: **POSITIVE EFFECT (D)*** Positive effect:

***Salcedo, 2000*** 50% and 75% reduction in malaria cases in the 1st and 2nd years respectively (more pronounced for *P. falciparum*), after CHW intervention.Decline in malaria prevalence was more pronounced in the municipality where CHW intervention took place compared with the whole state (Rondônia). |
| **Early malaria treatment**  Summary of the evidence: **POSITIVE EFFECT (D)*** Positive effect:

***Salcedo, 2000*** Decrease in period between appearance of first symptoms and treatment (3.5 to 1.3 days) after CHW intervention. |
| **Adult incidence of diarrhea**  Summary of the evidence: **NULL EFFECT (D)*** Null effect:

***Kirchoff , 1985***  Despite water contamination reduction in houses visited by CHWs, there was no reduction of gastrointestinal symptoms.\* |
| **High risk HPV detection through self sampling**  Summary of the evidence: **POSITIVE EFFECT (D)*** Positive effect:

***Holanda, 2006*** Test sensitivity was the same for samples collected by women themselves (self sampling) instructed by CHWs compared with samples collected by gynecologists (63.3% vs. 66.7% for low grade lesions; p=0.94 and 88.9% vs. 88.9% for high grade lesions).  |
|  **Identification of respiratory symptoms (screening for tuberculosis)**  Summary of the evidence: **POSITIVE EFFECT (D)*** Positive effect:

***Nogueira, 2007*** Right after specific training about tuberculosis, the demand for BAAR tests increased (67 exams in 2002 vs. 15 exams in July 2001), but increase was not sustainable after 2 months. |
| **Adherence to Directly Observed Treatment (DOT) for tuberculosis**  Summary of the evidence: **POSITIVE EFFECT (C)** * Positive effect:

***Cavalcante, 2007*** For shantytown population, adjusted through multiple regression, with self administered treatment as reference group: DOT with CHW (OR 3.0; 95%CI 1.9–4.8) vs. DOT in health facility (OR 1.5; 95%CI 0.9–2.4).DOT acceptance: 98.9% with CHW vs. 60% in health facility; p<0.001. |
| **Index of *Aedes aegypti* larvae**  Summary of the evidence: **POSITIVE EFFECT (C)** * Positive effect:

***Chiaravalloti, 2008*** Decreased from 6.9% to 4.4% (p = 0.04) from initial to final survey (after CHW intervention with specific training):  |
| **Users’ knowledge about  *Aedes aegypti* infection** Summary of the evidence: **NULL EFFECT (C)*** Null effect:

***Chiaravalloti, 2008* N**o difference in user’s knowledge after CHW intervention. |
| **Quality of water after chlorination**  Summary of the evidence: **POSITIVE EFFECT (D)*** Positive effect:

***Kirchoff , 1985*** Mean level of water contamination in households visited by CHWs was lower (70 vs. 16,000 organisms/dl, P < 0.001). |
| **Drinking water treatment**  Summary of the evidence: **POSITIVE EFFECT (C)*** Positive effect:

***Emond, 2002*** Among households visited by CHWs, 25% of women answered that boiling water was a preventive measure against various diseases compared to 14% in households not visited by CHWs (p=0.001). |
| **Women’s knowledge about Sexually Transmitted Diseases (STDs)**  Summary of the evidence: **POSITIVE EFFECT (C)*** Positive effect:

***Emond, 2002*** Knowledge about STDs (correct answers about sexual transmission of HIV) was 84% with CHWs visits vs. 64% without CHWs visits (p=0.001). |
| **Other outcomes** |
| **Inequities reduction**  Summary of the evidence: **POSITIVE EFFECT (C)*** Positive effect :

***Cesar, 2005a*** CHWs visited more frequently the children whose mothers had lower educational level and who belonged to poorer families (p<0.001). ***Coutinho, 2005*** Among the group assigned home visits, all socioeconomic groups benefited and no inequity of effect of the intervention was found, compared to hospital-based intervention only, where systematic differences were found benefiting better off and better educated mothers. |

\*Statistical tests results not showed in the study.

†Finding probably not associated with better maternal and child health.

‡For the purpose of this review, effectiveness of screening interventions is not being discussed, only results of CHW intervention is being described.

**Table 1:** Synthesis of studies according to community worker and population profiles, geographic scope and study design.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Community worker profile** | **Population profile** | **Geographic** **scope\*** | **Study designα** |
|  | CHA-PACS or ESF | CHW other project | Pastoral | CHW prior to PACS | Other | Urban | Rural | Urban and rural | Small | Medium | Large | Cross-sectional | Before and after | Ecological/Secondary data trends analysis | Cohort | Non randomized intervention study | Randomized clinical trial |
| Cavalvante, 2007 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cesar, 2008† |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cesar, 2005a |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cesar, 2005b |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cesar, 2002‡ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Chiaravalloti, 2008 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Coutinho, 2005 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Emond, 2002§ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Frazão, 2009 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Guanais, 2009 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Holanda, 2006 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Kirchoff, 1985 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Leite, 2005 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Mauad, 2009 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Minayo, 1990 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Nations, 1988£ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Neumann, 1999 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Neumann, 2002 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Nogueira, 2009 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ramos-Cerqueira, 2005 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Salcedo, 2000 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Svitone, 2000 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Targa, 2006 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **TOTAL 23 (100%)** | **14****(61)** | **2****(9)** | **4****(17)** | **1****(4)** | **3****(13)** | **10 (43)** | **7** **(30)** | **6** **(26)** | **9****(39)** | **8****(35)** | **6****(26)** | **10****(43)** | **5****(22)** | **2****(9)** | **2****(9)** | **4****(17)** | **2****(9)** |

\*Small: neighborhood or areas within the municipality; Medium: municipality wide; and Large: More than one municipality, state, regional or national.

†Study was a comparison between CHAs and Pastoral agents.

‡Study about UNICEF Project employing CHWs.

§Study about the ProNatal Project including CHWs.

£Study conducted in 1988, prior to the PACS, but workers have a particular profile (healers).

αSome studies have more than one design.

**Figure 1: Results of search strategy and selection of references (Numbers within squares in the middle of the figure refer to the number of additional references found with each additional search strategy).**

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