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The effect of social franchising on access to and quality of health services in low- and middle-income countries (Review)

Koehlmoos TP, Gazi R, Hossain S, Zaman K

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TABLE OF CONTENTS



[Intervention Review]

The effect of social franchising on access to and quality of health services in low- and middle-income countries

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ABSTRACT

Background

Social franchising has developed as a possible means of improving provision of health services through engaging the non-state sector in low- and middle-income countries.

Objectives

To examine the evidence that social franchising has on access to and quality of health services in low- and middle-income countries.

Search methods

We searched the Cochrane Effective Practice and Organisation of Care (EPOC) Group Specialised Register (up to October 2007), Cochrane Central Register of Controlled Trials (*The Cochrane Library* 2007, Issue 3), MEDLINE, Ovid (1950 to September Week 3 2007), EMBASE, Ovid (1980 to 2007 Week 38), CINAHL, Ovid (1982 to September Week 3 2007), EconLit, WebSPIRS (1969 to Sept 2007), LILACS, Science Citation Index Expanded and Social Sciences Citation Index (1975 to March 2008), Sociological Abstracts, CSA Illumnia (1952 September 2007), WHOLIS (1948 November 2007).

Selection criteria

Randomized controlled trials, non-randomized controlled trials, controlled before and after studies and interrupted time series comparing social franchising models with other models of health service delivery, other social franchising models or absence of health services.

Data collection and analysis

Two review authors independently applied the criteria for inclusion and exclusion of studies to scan titles and abstracts. The same two review authors independently screened full reports of selected citations. At each stage, results were compared and discrepancies settled through discussion.

Main results

No studies were found which were eligible for inclusion in this review.



Authors' conclusions

There is a need to develop rigorous studies to evaluate the effects of social franchising on access to and quality of health services in lowand middle-income countries. Such studies should be informed by the wider literature to identify models of social franchising that have a sound theoretical basis and empirical research addressing their reach, acceptability, feasibility, maintenance and measurability.

PLAIN LANGUAGE SUMMARY

Social franchising to increase access to and quality of health services in low- and middle-income countries

Governments are looking for ways to increase the access to and quality of health care services in low- and middle-income countries. One system not connected to the public sector, has been to provide health services through a franchise, called social franchising. The concept of franchising for health services is similar to franchises in business. A franchiser develops a successful way to provide the health services, and then other franchisees copy the model in other franchises. Each franchisee, though, has to follow the original model. There is also usually specific training, protocols and standards to follow, monitoring, and a brand name or logo which identifies that the provider is part of a franchise.

There is hope and early work reports that social franchising may quickly spread health services in low- and middle income countries to improve health. But this Cochrane review did not find any rigorous evidence to demonstrate the effect of social franchising on access to and quality of care in low- and middle-income countries. Well designed studies are needed.

A summary of this review for policy makers is available here



BACKGROUND

In many low- and middle-income countries (LMIC) a substantial proportion of all health services are sought in the non-state sector (Bustreo 2003; Mills 2002; USAID-India 2006; WHO and USAID 2007). There is growing acknowledgement that governments and donors must look beyond the traditional boundaries of public health service delivery and engage the private sector (Bennet 2005) although it is not clear how best to do this and interventions to work with the private sector may have unintended effects (Waters 2003). Due to the ambitious health objectives established by the Millennium Development Goals with its rapidly approaching deadline, a sense of urgency is added to the necessity of non-state sector engagement (UN 2005; Working with the non-state sector 2006). Many key decision makers in the health sector have looked toward reforms that can produce greater access, quality, efficiency and equity of health services (Liu 2004). Further, the shift in health sector reform in low- and middle-income countries has been away from expanding direct government involvement in service delivery toward those efforts with a greater role in health care funding or management and toward engaging the private sector via a variety of contracting mechanisms (USAID PSP-One 2006). One type of contracting of health services to the non-state sector is social franchising. In recent years policy makers, health sector leaders and donors have focused an increasing amount of attention on social franchising as a solution in primary care, reproductive and sexual health, TB and HIV/AIDS diagnosis and care (Jefferys 2004; Makinen 1997; Montagu 2002; Perrot 2006; Peters 2004; Ruster 2003; Smith 2002; WHO and USAID 2007).

Social franchising is defined as a system of contractual relationships "usually run by a non-governmental organization which uses the structure of a commercial franchise to achieve social goals" (Montagu 2002). The overarching difference between social and commercial franchising is that social franchising seeks to fulfil a social benefit where as commercial franchising is driven by profit (WHO and USAID 2007). The definition can further be expanded to mean:

 The social franchise is an adaptation of a commercial franchise in which the developer of a successfully tested social concept (franchiser) enables others (franchisees) to replicate the model using the tested system and brand name to achieve a social benefit. The franchisee in return is obligated to comply with quality standards, report sales and service statistics, and in some cases, pay franchise fees. All service delivery points are typically identified by a recognizable brand name or logo (WHO and USAID 2007).

In social franchising, belonging to a network is an essential element and in this network the coordinator (franchiser) has the mandate to harmonize the network and ensure consistency among the franchisees (medical providers) (Perrot 2006; Prata 2005). Often, in order to produce the desired social benefit, social franchises provide subsidized services so that the recipient of services has a lower out-of-pocket payment. The elements that typify a social franchising package are:

- training (e.g. in clinical procedures, business management);
- protocolized management (e.g. for antenatal care, childhood diarrhoea);

- standardization of supplies and services (e.g. birthing kits, HIV tests);
- branding (e.g. use of a logo on signs, products, or garments);
- monitoring (e.g. quarterly reports to franchiser, reviews);
- network membership (e.g. more than one franchisee in the organization).

Although similar to social marketing programs, this review will focus on social franchising in which the emphasis is on the delivery of health *services* rather than on health products alone (WHO and USAID 2007). Franchising for health services (clinical franchising) can be further categorized according to the following models and the strength of the network.

- Stand-alone model practices established to provide exclusively franchise supported services or commodities
- Fractional model: franchise services are added to an existing practice
- First generation franchising where the franchiser offers a territory and use of franchising within the guidelines.
- Second generation franchising includes the elements of first generation franchising and further includes active monitoring and control (creating a tighter, more structured, more regulated network) (Stephenson 2004)

These models of social franchising may differ in their effects. Any effects may also be modified by other factors, such as the type of franchiser (government, donors or non-governmental organizations (NGOs)), the services they deliver (tuberculosis (TB), sexual and reproductive health, Primary Care, HIV/AIDS care); the type of health care professionals engaged (physician, nurse, community health worker, paramedic); the study setting (rural versus urban); or socioeconomic status of study population, provider, or country (ultra-poor, low-income, middle income high income).

The growth of interest in social franchising has developed in the absence of robust evidence of its effects. The literature is generally optimistic and early results indicate that social franchising can "rapidly expand health coverage to the poor, capture economies of scale and reduce the information asymmetries that often adversely affect quality of care" (Ruster 2003). To date there has been no systematic review of the evidence as to whether social franchising as a strategy produces beneficial results or has unintended adverse effects such as further splintering already scarce resources, crowding out existing providers, reducing provider satisfaction and competition between social goals and client motivation (Moran 2004).

Examples of published work in this area include Stephenson's look at "Franchising Reproductive Health Services" (Stephenson 2004) which evaluated networks of franchised health services in three different countries from both a provider and client perspective; Prata's "Private Sector, human resource and health franchising in Africa" (Prata 2005), Ladipo's "Family planning in traditional markets in Nigeria" (Ladipo 1990) and Lonnroth's "Social franchising of TB through GPs in Myanmar: an assessment of treatment results, access, equity and financial protection" (Lonnroth 2007). It is likely that much of the work in this area resides in the grey literature and is the property of franchising organizations (Huntington 2007). We saw a need to systematically

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review the published and, so far as possible, unpublished, literature evaluating the effects of social franchising.

OBJECTIVES

The objective of this review was to assess the effects of social franchising of health service delivery on access to and quality of services and on health outcomes.

METHODS

Criteria for considering studies for this review

Types of studies

- Randomized Controlled Trials (RCT)
- Non-Randomized Controlled Trials (CCT)
- Interrupted Time Series (ITS) provided that:

-the point in time when the intervention occurred is clearly defined;

-there are at least three or more data points before and after the intervention

• Controlled Before-After Studies (CBA), with at minimum two clusters in each comparison group

Types of participants

Included:

- All levels of health care delivery were eligible.
- All types of patients/consumers and healthcare professionals/ providers in low-and middle-income countries were eligible (World Bank 2007).

Excluded:

• Studies set in high-income countries (World Bank 2007).

Types of interventions

Social franchises were considered for inclusion in this review if they provide health services delivery, which means that health professionals deliver health care services to the clients.

Further, the overarching aim behind the implementation of the social franchise must be one of social benefit, for instance the extension of health service delivery or improving the quality of health service delivery, rather than commercial benefit.

To be included an intervention needed to include all of the following elements:

- A franchiser and franchisees
- The franchiser must be an NGO or government.

- There must be multiple franchisees of independent providers/ sites/locations that deliver care by health professionals.

- Branding
- Standardization of supplies, delivery/processes, management, including training, monitoring, and protocols

In addition, there may be other marketing strategies, including advertising (using mass media or personal media).

We considered four main comparisons:

- 1. Social franchising interventions compared to no health services.
- 2. Social franchising interventions and public health services to public health services alone.
- 3. Social franchising interventions compared to other non-state services including, but not limited to: private providers, and other contracting arrangements.
- 4. Comparisons of different models of social franchising (stand alone, fractional, first generation, second generation).

Studies were excluded if they did not include a social franchise for the delivery of health services.

We further excluded studies of services limited to delivering messages (health promotion or education) or commodities (e.g. condoms, bed nets) alone, which are more commonly described as social marketing. We excluded studies that only measure changes in health knowledge, attitudes or beliefs.

We excluded studies of lay health worker interventions or peer educators, which are examples of services that are not delivered by health professionals.

Types of outcome measures

Primary outcomes

To be included studies must have reported at least one of the following primary outcomes.

Primary outcomes measured as changes in:

- access (e.g. affordability, utilization, client volume, attendance);
- quality of care (e.g. compliance with guidelines, case notification for TB);
- health outcomes;
- adverse effects (in addition to undesirable impacts on any of the above outcomes, e.g. undesirable impacts on existing public or private services, inappropriate use of services, distortions in the provision of services).

Secondary outcomes

When provided we planned also to collect information on the following secondary outcomes.

- Equitable access or utilization (distribution of access across sociodemographic characteristics).
- Cost/service (from a societal perspective or the perspective of the franchiser, franchisee or patients).
- Patient satisfaction (e.g. intent to return).

Search methods for identification of studies

Electronic searches

See: Effective Practice and Organization of Care Group methods used in reviews.

We searched the following electronic databases for primary studies.

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- Cochrane Effective Practice and Organisation of Care Group Specialised Register (and database of studies awaiting assessment) (searched 01 October 2007).
- Cochrane Central Register of Controlled Trials (*The Cochrane Library* 2007, Issue 3) (searched 28 September 2007).
- MEDLINE, Ovid (1950 to September Week 3 2007) (searched 01 October 2007).
- EMBASE, Ovid (1980 to 2007 Week 38) (searched 01 October 2007).
- CINAHL, Ovid (1982 to September Week 3 2007) (searched 01 October 2007).
- EconLit, WebSPIRS (1969 to Sept 2007) (searched 01 October 2007).
- LILACS (26/09/2007) (searched 28 January 2008).
- Science Citation Index Expanded and Social Sciences Citation Index (1975-present) (searched 11 March 2008).
- Sosiological Abstracts, CSA Illumnia (1952 Current) (searched 28 September 2007).
- WHOLIS (1948 present) (searched 11 November 2007).

Search strategies for primary studies incorporate the methodological component of the EPOC search strategy combined with selected index terms and free text terms. We translated the MEDLINE search strategy into the other databases using the appropriate controlled vocabulary as applicable.

Search strategies for electronic databases were developed using the methodological component of the EPOC search strategy combined with selected MeSH terms and free text terms related to social franchising. The following are the terms that were used in the MEDLINE Ovid search strategy. We translated this search strategy into the other databases using the appropriate controlled vocabulary as applicable.

We used the MEDLINE Ovid search strategy shown in Appendix 1 from 1950 to date. It was adapted for the other databases listed above.

Full search strategies for the other databases are shown in the following appendices.

- Sociological abstracts: Appendix 2.
- EMBASE: Appendix 3.
- EPOC: Appendix 4.
- CENTRAL: Appendix 5.
- CINAHL/Ovid: Appendix 6.
- Econlit: Appendix 7.
- LILACS: Appendix 8.

The Database of Abstracts of Reviews of Effectiveness (DARE) was searched for related reviews.

A search log is shown in Appendix 9.

Searching other resources

- Eldis
- Google Scholar
- World Bank
- Reference lists of all papers and relevant reviews identified.

- Authors of relevant papers regarding any further published or unpublished work.
- Science Citation Index and Social Science Citation Index.

Data collection and analysis

Selection of studies

Two review authors (TK and RG) screened the titles and abstracts (if available) of all articles obtained form the search, using EPPI-reviewer software to manage the information electronically (Thomas 2006). Our search produced a total of 2210 abstracts or titles or both. The numbers of titles and abstracts (if available) from each search appears in Appendix B. The review authors independently determined if studies met the inclusion criteria. We found no abstracts that were deemed eligible for closer inspection. During future updates of this review, those abstracts that appear to meet the inclusion criteria but are later deemed unsuitable for inclusion will be listed in the table 'Characteristics of excluded studies' together with the reasons for their exclusion. We will resolve disagreement between the two review authors through discussion with a third review author (KZ). If necessary, attempts will be made to contact the authors of studies that required further clarification.

Data extraction and management

A data extraction framework was designed, but not implemented as no studies were found that were eligible for inclusion in this study.

In future updates of this review, should eligible studies be found, one review author (TK) will extract the data from all studies using a standardized form in EPPI-Reviewer. One of two other review authorswill similarly and independently extract the data (RG or SH). If necessary, attempts will be made to contact the authors of studies that require additional information.

Data relating to the following items will be extracted from all included studies.

1) Participants (health providers and consumers). For health providers this will include the number of providers and information on type of health care provider. For consumers, this will include the number of consumers and the health problems/ treatment received, age, and demographic details and their cultural background.

2) Health care setting (rural, formal urban settlement, informal urban settlement (slum)) and country.

3) Study design and the key features of studies.

4) Intervention (specific training, ongoing monitoring, branding, network affiliation, standardization of supplies and services, protocol treatment guidelines) and health care services performed within the social franchise. Attempts will be made to extract a full-description of the intervention.

5) Number of franchises within the social franchising program.

6) Results grouped according to the primary and secondary outcomes specified above.

Researchers experienced in review methodology (SO, KD), but new to the topic of social franchising, will also screen for inclusion a

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subset of studies identified by the search strategy, and extract the data from a subset of included studies.

Assessment of risk of bias in included studies

Studies eligible for inclusion were to be assessed for their quality by two independent review authors (TK and RG) using the methodological quality criteria in the Effective Practice and Organisation of Care Group's (EPOC) quality checklists for randomised controlled trials (RCT), interrupted time series (ITS) and controlled before-after (CBA) trials.

Data synthesis

Should eligible studies be found in future, dichotomous and continuous data will be analysed separately. If possible, we will extract or calculate risk ratios and 95% confidence intervals for dichotomous outcomes. For continuous outcomes, we will calculate mean differences if possible.

Cluster and controlled before and after studies with errors in the unit of analysis will be reanalyzed if intra-cluster correlation coefficients (ICCs) can be extracted. If ICCs cannot be found in the included studies, the ICCs will be estimated from similar studies with similar outcomes. If papers with an ITS design or data do not provide an appropriate analysis or report of the results, but present the data points in a graph or table, we will reanalyse the data using methods described in Aaserud et al (Aaserud 2006).

We anticipate substantial variation among studies that meet our inclusion criteria, including differences in the:

- type of social franchise (for-profit, not-for-profit, first generation versus second generation, full versusfractional);
- involvement of government, donors, and NGOs;
- services they deliver (TB, sexual and reproductive health, Primary Care, HIV/AIDS care);
- type of health care professionals (physician, nurse, community health worker, paramedic);
- study setting (rural versus urban);
- socioeconomic status of study population, provider, or country (ultra-poor, low-income, middle income high income)
- study design and the methodological quality of the studies (RCT, CCT, ITS, CBA)

If we are able to, we will group studies based on the type of franchise and services delivered and consider the differences listed above as possible explanatory factors for differences in effects across studies. If possible, we will visually explore any heterogeneity in results for the primary using bubble plots or box plots (displaying medians, interquartile ranges and ranges). If there are sufficient data, we will also explore heterogeneity in the findings for the primary outcomes using meta-regression.

RESULTS

Description of studies

The search yielded no randomised controlled trials, nonrandomized controlled trials, interrupted time series or controlled before and after studies evaluating the effect of social franchising on access to and quality of health service delivery in low- and middle-income countries. A description of abstracts that addressed social franchising and reasons for their exclusion are given in Characteristics of excluded studies.

One example is by Lonnroth (Lonnroth 2007) who reported an interrupted time series study which aimed to evaluate the effects of social franchising. However, this study was excluded because of lack of sound data for eligible outcomes. There was no preintervention data for patient-reported outcomes, and there was no measure of the completeness of notification. The notification measures reported were not able to distinguish between changes in prevalence of TB and changes in completeness of notification.

Risk of bias in included studies

No studies were found to be suitable for inclusion.

Effects of interventions

No studies were found to be eligible for inclusion in this review.

DISCUSSION

We cannot draw reliable conclusions about the impact of social franchising in the absence of robust evidence from rigorously designed studies. Although this evidence does not yet exist, it is within the reach of current methodologies. Lonnroth et al (Lonnroth 2007) sought to assess the effects of the SQH franchise, focusing on four public health domains: (1) contribution to TB case notification, (2) ensuring equity in access, (3) curing patients equitably, and (4) protecting patients from adverse financial and social consequences of TB and TB care. This study analysed (a) routine data from public services and the franchiser in townships with and without franchisees and (b) a survey of franchise patients. The patient survey was conducted two weeks after registering with the franchise and two weeks after their treatment outcome was registered and included no patients using comparison facilities, and therefore could be considered neither a controlled trial nor an interrupted time series design. Routine data was presented for seven periods before and seven periods after the introduction of social franchising in some but not all townships. The authors reported a relative change in case notification over the seven periods before the franchise was introduced compared with the seven periods afterwards. They concluded that the averaged notification rate was higher after the intervention than before introducing the franchise, and therefore franchising was successful. However, interpretation using, not averages, but changes over time, suggest an increasing notification rate before introducing the franchise, and a stabilised rate after introducing the franchise, suggesting franchising was not successful. Interpreting the meaning of this relative change (whether an increase or a stabilisation) is hampered by the lack of independent data reporting the prevalence of TB in those areas over those time periods. In order to define a notification rate both a numerator and denominator are required; the numerator being the number of cases that are notified and the denominator is the total number of cases ascertained through use of supplemental data sources. (Pillaye 2003). Lonnroth et al (Lonnroth 2007) do not report a denominator for TB prevalence. Instead they rely on the contribution of notification from franchisees. Given the lack of unequivocal measures of completeness of notification, we judged this study ineligible for the review. However, it does show that mounting an interrupted time series evaluation of social franchising is possible.

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There is a need for well designed experimental studies that are informed by the theoretical and empirical literature. The definitions and characterizations of social franchising models offered in this review provide clear intervention designs based on theoretical literature, and policy and practice reflections to be considered for rigorous evaluation. However, it is unclear from this literature which designs of social franchise interventions are ready for experimental design evaluation. Hawe, Degeling and Hall (Hawe 1990) advise that rigorous evaluations of effects follow formative and process evaluations, and appropriate methods development for outcomes assessment. The study by Lonnroth et al (Lonnroth 2007) on the SQH franchise in Myanmar comes close, even though it was conducted retrospectively. Purpose-built evaluations are needed In addition, the Guidelines for Systematic Reviews of Health Promotion and Public Health Interventions Taskforce (Jackson 2005) emphasizes the importance of sustainability.

Given that social franchising remains an area of great interest as a model for engaging the non-state sector in the provision of health services in developing country settings, we anticipate benefits from a wider review of the literature to find those models of social franchising for which there are sound theoretical bases for causal assumptions, good evidence of intervention design, reach, adoption by franchisees and service users, implementation (adherence and integrity), and maintenance (or sustainability), and agreement on measurable and testable social franchising activities and goals.

AUTHORS' CONCLUSIONS

Implications for practice

No firm conclusions can be made about the effect of social franchising on access to and quality of health services in low-

and middle-income countries. Governments, non-government organizations and international donor organizations should implement social franchises for LMICs with integral evaluations in order to learn whether and how they affect access to and quality of health services.

Implications for research

We need high quality impact evaluations of social franchising. Future evaluations of social franchising interventions should be experimental or quasi-experimental designs. Further, evaluations of social franchising interventions should not focus on outcomes alone, it is necessary to consider and record processes so that learning can be shared across contexts, which is particularly important in the non-state sector. Governments, non-government organizations and international donor organizations should work with research organizations to develop rigorous evaluations of new and existing social franchising models. This should be informed by a systematic map of the wider literature to identify models of social franchising that have a sound theoretical basis and empirical research addressing their reach, acceptability, feasibility, maintenance and measurability.

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CHARACTERISTICS OF STUDIES

Characteristics of excluded studies [ordered by study ID]

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* Indicates the major publication for the study

Study	Reason for exclusion
Agha 2007	Not an RCT, CBA or ITS; non-experimental design with pre- and post test
LaVake 2003	Not an RCT, CBA or ITS; a review paper
Lonnroth 2007	Not an RCT, CBA or ITS; a survey of franchise patients, and a pseudo-ITS but without an unequivocal measure of notification rate
McBride 2001	Not an RCT, CBA or ITS; a case study
Montagu 2002	Not an RCT, CBA or ITS; a review paper
Prata 2005	Not an RCT, CBA or ITS; a review paper
Ruster 2003	Not an RCT, CBA or ITS; a review paper
Smith 2002	Not an RCT, CBA or ITS; description of social franchising and eight brief descriptive case studies
Stephenson 2004	Not an RCT, CBA or ITS; analysis of multi-participant cluster sample surveillance data

CBA: Controlled Before-After ITS: Interrupted Time Series

RCT: randomised controlled trial

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APPENDICES

Appendix 1. MEDLINE search strategy

The MEDLINE strategy is a combination of MeSH terms and text words.

- Line 1-13: terms related to franchising
- Line 15-23: terms related to developing countries

Line 26-39: EPOC methodology filter for RCT, CCT, CBA and ITS

- 1. Outsourced Services/
- 2. "Marketing of Health Services"/
- 3. "Delivery of Health Care"/
- 4. Organizations, Nonprofit/
- 5. Private Sector/
- 6. (marketing adj3 services).tw.
- 7. (deliver\$ adj3 care).tw.
- 8. ((non profit or nonprofit) adj3 (organizat\$ or organisat\$)).tw.
- 9. (private adj3 sector?).tw.
- 10. (sponsor\$ and service\$).tw.
- 11. franchis\$.tw.
- 12. (branding or brand name\$ or brand imag\$).tw.
- 13. outsourc\$.tw.
- 14. or/1-13
- 15. Developing Countries/

16. (less-developed countr\$ or third world countr\$ or under developed countr\$ or underdeveloped countr\$ or developing nation? or less developed nation? or third world nation? or under developed nation? or underdeveloped nation? or developing countr\$).tw.

17. (low income count\$ or low income nation? or middle income count\$ or middle income nation? or "low and middle income" or lmic or lmics).tw.

- 18. exp "Africa South of the Sahara"/
- 19. exp Asia, Western/
- 20. exp Asia, Southeastern/
- 21. exp Asia, Central/
- 22. Mexico/
- 23. exp South America/
- 24. or/15-23
- 25. 14 and 24
- 26. randomized controlled trial.pt.
- 27. controlled clinical trial.pt.

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- 28. random\$.tw.
- 29. (time adj series).tw.
- 30. controlled before.tw.

31. or/26-30

- 32. (pre-test or pretest or posttest or post-test).tw.
- 33. control\$.tw.
- 34. 32 and 33
- 35. 31 or 34
- 36. Animals/
- 37. Humans/
- 38.36 not (36 and 37)
- 39. 35 not 38
- 40. 25 and 39

Appendix 2. Sociological abstracts search strategy

franchis* or branding or brand name* or brand image* or outsourc* or marketing or sponsor* or deliver* or private sector* or nonprofit or non profit AND health servic* or healthcare servic* or health care servic* or medical servic* AND developing countr* or developing nation* or underdeveloped or third world or low income or middle income or lmic or lmics

Appendix 3. EMBASE search strategy

- 1. Financial Management/
- 2. Health Care Delivery/
- 3. Non Profit Organization/
- 4. (marketing adj3 services).tw.
- 5. (deliver\$ adj3 care).tw.
- 6. ((non profit or nonprofit) adj3 (organizat\$ or organisat\$)).tw.
- 7. (private adj3 sector?).tw.
- 8. (sponsor\$ and service\$).tw.
- 9. franchis\$.tw.
- 10. (branding or brand name\$ or brand imag).tw.
- 11. outsourc\$.tw.
- 12. or/1-11
- 13. Developing Country/

14. (less-developed countr\$ or third world countr\$ or under developed countr\$ or underdeveloped countr\$ or developing nations or less developed nations or third world nations or under developed nations or underdeveloped nations or developing countr\$).tw.

15. (low income count\$ or low income nation\$ or middle income count\$ or middle income nation\$ or "low and middle income" or lmic or lmics).tw.

16. exp "Africa South of the Sahara"/

17. exp Asia/

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- 18. Mexico/
- 19. exp South America/

20. or/13-19

- 21. 12 and 20
- 22. Randomized Controlled Trial/
- 23. random\$.tw.
- 24. Time Series Analysis/
- 25. (time adj series).tw.
- 26. controlled before.tw.
- 27. or/22-26
- 28. (pre test or pretest or post test or posttest).tw.
- 29. control\$.tw.
- 30. 28 and 29
- 31. 27 or 30
- 32. Nonhuman/
- 33. 31 not 32
- 34. 21 and 33

Appendix 4. EPOC register search strategy

- 1. Outsource
- 2. Outsourced
- 3. Outsourceing
- 4. Outsourcing
- 5. Franchise
- 6. Franchises
- 7. Franchiseing
- 8. Franchising
- 9. Franchised
- 10. Franchisee
- 11. Franchisees
- 12. Branding
- 13. Brand name
- 14. Brand image
- 15. Brand images

Searched one term at a time.



Appendix 5. CENTRAL search strategy

- #1 MeSH descriptor Outsourced Services, this term only
- #2 MeSH descriptor Marketing of Health Services explode all trees
- #3 MeSH descriptor Delivery of Health Care, this term only
- #4 MeSH descriptor Organizations, Nonprofit, this term only
- #5 MeSH descriptor Private Sector, this term only
- #6 (marketing NEAR/3 services):ti or (marketing NEAR/3 services):ab
- #7 (deliver* NEAR/3 care):ti or (deliver* NEAR/3 care):ab
- #8 (non profit or nonprofit) NEAR/3 (organizat* or organisat*):ti or (non profit or nonprofit) NEAR/3 (organizat* or organisat*):ab
- #9 (private NEAR/3 sector*):ti or (private NEAR/3 sector*):ab
- #10 (sponsor* and service*):ti or (sponsor* and service*):ab

#11 (franchis* or branding or brand NEXT name* or brand NEXT image* or outsourc*):ti or (franchis* or branding or brand NEXT name* or brand NEXT image* or outsourc*):ab

#12 MeSH descriptor Developing Countries, this term only

#13 (less NEXT developed NEXT countr* or third NEXT world NEXT countr* or under NEXT developed NEXT countr* or underdeveloped NEXT countr* or developing NEXT nation* or less NEXT developed NEXT nation* or third NEXT world NEXT nation* or under NEXT developed NEXT nation* or underdeveloped NEXT nation* or underdeveloped NEXT countr*):ti or (less NEXT developed NEXT countr* or third NEXT world NEXT countr* or under NEXT developed NEXT countr* or underdeveloped NEXT countr* or underdeveloped NEXT countr* or third NEXT world NEXT countr* or underdeveloped NEXT countr* or underdeveloped NEXT countr* or underdeveloped NEXT countr* or developing NEXT countr* or developing NEXT countr* or developing NEXT countr* or developed NEXT countr* or underdeveloped NEXT countr* or developing NEXT nation* or less NEXT developed NEXT nation* or under NEXT developed NEXT countr* or underdeveloped NEXT nation* or under NEXT developed NEXT countr* or underdeveloped NEXT nation* or underdeveloped NEXT

#14 (low NEXT income NEXT count* or low NEXT income NEXT nation* or middle NEXT income NEXT count* or middle NEXT income NEXT nation* or "low and middle income" or lmic or lmics):ti or (low NEXT income NEXT count* or low NEXT income NEXT nation* or middle NEXT income NEXT nation* or "low and middle income" or lmics):ab

- #15 MeSH descriptor Africa South of the Sahara explode all trees
- #16 MeSH descriptor Asia, Western explode all trees
- #17 MeSH descriptor Asia, Southeastern explode all trees
- #18 MeSH descriptor Asia, Central explode all trees
- #19 MeSH descriptor Mexico, this term only
- #20 MeSH descriptor South America explode all trees
- #21 (#1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #10 OR #11)
- #22 (#12 OR #13 OR #14 OR #15 OR #16 OR #17 OR #18 OR #19 OR #20)
- #23 (#21 AND #22)

Appendix 6. CINAHL/Ovid search strategy

- 1. Contract Services/
- 2. exp Marketing/
- 3. Health Care Delivery/
- 4. Organizations, Nonprofit/
- 5. Private Sector/



- 6. (marketing adj3 services).tw.
- 7. (deliver\$ adj3 care).tw.
- 8. ((non profit or nonprofit) adj3 (organizat\$ or organisat\$)).tw.
- 9. (private adj3 sector?).tw.
- 10. (sponsor\$ and service\$).tw.
- 11. franchis\$.tw.
- 12. (branding or brand name\$ or brand imag\$).tw.
- 13. outsourc\$.tw.
- 14. or/1-13
- 15. Developing Countries/

16. (less-developed countr\$ or third world countr\$ or under developed countr\$ or underdeveloped countr\$ or developing nations or less developed nations or third world nations or under developed nations or underdeveloped nations or developing countr\$).tw.

17. (low income count\$ or low income nation\$ or middle income count\$ or middle income nation\$ or "low and middle income" or lmic or lmics).tw.

- 18. exp "Africa South of the Sahara"/
- 19. exp Asia, Central/
- 20. exp Asia, Southeastern/
- 21. exp Asia, Western/
- 22. Mexico/
- 23. exp South America/
- 24. or/15-23
- 25. 14 and 24
- 26. Clinical Trial/
- 27. exp Pretest-Posttest Design/
- 28. exp Quasi-Experimental Studies/
- 29. (controlled adj (study or trial)).tw.
- 30. random\$.tw.
- 31. time series.tw.
- 32. controlled before.tw.
- 33. or/26-32
- 34. (pre-test or pretest or posttest or post-test).tw.
- 35. control\$.tw.
- 36. 34 and 35
- 37. 33 or 36
- 38. 25 and 37



Appendix 7. Econlit search strategy

#1 (franchis* or contract* or branding or (brand name*) or (brand imag*) or outsourc* or marketing or sponsor* or deliver* or (private sector*) or (nonprofit organi?ation*) or (non profit organi?ation*) or (nonprofit institution*) or (non profit institution*) and(health or healthcare or medical)and((developing countr*) or (developing nation*) or underdeveloped or "third world" or ("low and middle") or ("low income") or ("middle income") or lmic or lmics)

Appendix 8. LILACS search strategy

((marketing OR comercializa\$) AND (services OR servicios OR serviços)) OR (((non profit OR (sin AND Fines AND Lucro) OR (sem AND Fins AND Lucrativos)) AND (organizat\$ OR organizat\$ OR organizac\$ OR organizac\$))) OR ((private OR privado) AND (sector OR setor)) OR (sponsor \$ AND (service\$ OR servicio\$ OR serviço\$)) OR (Franchis\$ OR franquic\$ OR franquia) OR (branding OR brand name OR brand imag\$ OR marca) OR (outsourc\$ OR Servicio\$ Extern\$ OR Serviço\$ Terceirizad\$) OR [MH]"Outsourced Services" or [MH]"Delivery of Health Care" or [MH]"Marketing of Health Services" or [MH]"Organizations, Nonprofit" or [MH]"Private Sector" AND CT COMPARATIVE STUDY or random\$ or intervencion or intervenção or control\$

Appendix 9. Search log of Social Franchising

Search Log of Social Franchising.

June 2008		
SOURCE database	Date Of Search	# Of Hits
Major Databases		
Sciological Abstracts/CSA Illumnia	28/09/2007	288
EMBASE/OVID	01/10/2007	279
LILACS/ BIRME	28/01/2007	711
EPOC Register/BiblioWeb	01/10/2007	8
CENTRAL Cochrane Library Online	28/09/2007	52
CINAHL/Ovid	01/10/2007	42
MEDLINE/Ovid	01/10/2007	212
ISI web of science /Science Citation Index and Social science citation in- dex	11/3/2008	15
EconLit/WebSPIRS	01/10/2007	198
Total Major Data bases		1805
Duplications removed	121	
Total Reviewed		1684
Minor databases + Hand Search		
World Bank (Two websites and data bases)	07-12/11/2007	164
WHOLIS	11/11/2007	7

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(Continued)		
WHO	11/11/2007	109
Marie Stopes International (MSI)	7/11/2007	16
USAID	11/11/2007	16
PSI	13/11/2007	40
MSH	18/11/2007	25
GTZ	18/11/2007	16
Futures group	19/11/2007	3
DFID	19/11/2007	53
BioMed Central/Developing countries	03/01/2008	2
Goggle Scholar	01/03/2008	65
ELDIS	04/03/2008	8
Green star / Green Key Pakistan and Janani India	18/12/2007	2
Total Reviewed		526

WHAT'S NEW

Date	Event	Description
14 October 2019	Amended	A link to a summary for policy-makers was added to the plain language summary

HISTORY

Protocol first published: Issue 2, 2008 Review first published: Issue 1, 2009

Date	Event	Description
17 February 2009	Amended	Plain language summary updated.
22 August 2008	Amended	Converted to new review format.

CONTRIBUTIONS OF AUTHORS

TK, RG, SH wrote the review with contributions from KZ.

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DECLARATIONS OF INTEREST

None

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Internal sources

• No sources of support supplied

External sources

• The Alliance for Health Policy and Systems Research in collaboration with the Global Health Forum, Switzerland.

INDEX TERMS

Medical Subject Headings (MeSH)

*Developing Countries; *Quality Indicators, Health Care; *Social Marketing; Community Health Services [organization & administration] [standards]; Health Services Accessibility [*standards]; Private Sector [*standards]

MeSH check words

Humans