Social Marketing Interventions for Neglected Tropical Diseases: A Systematic Review

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Neglected Tropical Diseases

- Population living in poverty
- WHO
  - 17 priority diseases (e.g. Leprosy, Schistosomiasis, Dengue and Chikungunya)
  - Zoonotic diseases (e.g. rabies, Taeniasis/Cysticercosis)
Neglected Tropical Diseases

- WHO 5 strategies
  - Control, prevention and elimination
    1. Preventive chemotherapy
    2. Intensified case-detection and case-management
    3. Vector control
    4. Veterinary public health
    5. WASH
Hierarchical Model of Social Marketing
(French & Russell-Bennett, 2015)

**PRINCIPLE**

Social value creation
through the exchange of social offerings (ideas, products, service, experience, environments, systems)

**CONCEPTS**

- Social Behavioral Influence
- Public / People Focus
- Social Offerings
- Relationship building

**TECHNIQUES**

- Integrated Intervention Mix
- Competition Analysis and Action
- Systematic Planning and Evaluation
- Insight-driven Segmentation
- Co-creation
Rationale

- Absence of social marketing systematic reviews about NTDs
- Not known how social marketing has been used to address NTDs
Objectives

- What social marketing **concepts and techniques** have been used in social marketing interventions aiming at influencing behaviors to prevent and control Neglected Tropical Diseases (NTDs) at community, health facility and policy level?

- What **behavioral determinants and behavioral outcomes** were addressed by social marketing interventions aiming at influencing behaviors to prevent and control Neglected Tropical Diseases (NTDs) at community, health facility and policy levels?
Methodology

Selection Process

Import to Covidence

Protocol → Database Search → Title & abstract screening → Full-text screening → Data extraction

SR methodology

1 Reviewer

Eligibility criteria:
- Peer-reviewed
- Published from 1971 – 2017

2 Reviewers
3rd Reviewer Discrepancies

Selection criteria:
- 17 WHO priority NTDs
- 3/4 SM Concepts
Min. Social behavioral influence
- 1/5 SM techniques
Min. Marketing mix

2 Reviewers
3rd Reviewer crosscheck

1 Reviewer
Methodology

- Databases:
  - PubMed
  - EbscoHost
  - ProQuest
  - Web of Science (WOS)
  - Global Index Medicus
  - Virtual Health Library (VHL) Regional Portal

- Search strategy developed for each database
Methodology

Sample search strategy:

(all(intervention) OR all(campaign) OR all(strategy) OR all(program) OR all(project)) AND (all("social marketing") OR all("health promotion") OR all("health communication")) AND ((all("neglected tropical diseas*") OR all("neglected diseas*")) AND all("health communication") OR all("tropical diseas*") AND all("NTD*")) OR (all("buruli ulcer") OR all("mycobacterium ulcerans") OR all("chagas disease") OR all("american trypanosomiasis") OR all("trypansosoma cruzi") OR all("dengue") OR all("mosquito") OR all("chikungunya") OR (all("dracunculiasis") OR all("guinea-worm disease") OR all("dracunculus medinensis") OR all("echinococcosis") OR all("echinococcus granulosus") OR all("cystic echinococcosis") OR all("hydatidosis") ...
Records identified through database searching (n = 4,136)

Additional records identified through other sources (n = 7)

Records after duplicates removed (n = 2,557)

Records screened (n = 2,557)

Records excluded (n = 2,506)

Full-text articles assessed for eligibility (n = 50)

Full-text articles excluded (n = 27)

Studies included in qualitative synthesis (n = 23)
Findings

- Diseases
- Countries
- Target audience
- Interventions
- Outcomes
Diseases

1. Dengue
2. Cysticercosis
3. Guinea-worm disease (Dracunliasis)
4. Leprosy
5. Lymphatic filariasis
6. Schistosomiasis
7. Soil-transmitted helminths (STH)
8. Trachoma
Findings

Countries

1. Australia
2. Brazil
3. China
4. Colombia
5. India
6. Indonesia
7. Kenya
8. Mexico
9. Nigeria
10. Saudi Arabia
11. Sri Lanka
12. Tanzania
13. United States
Findings

Target Audience

- Families of school children
- Primary school students
- Communities
- Female students, teachers and supervisors
- Young adults
- Health care providers
- Ethnic minority groups
- Indigenous communities
Findings

Interventions

- Health education
- Marketing mix
- Mass / community level communication
- COMBI
- Stakeholder engagement + Partnerships
- Toilet-building
- Subsides / rewards
- MDA campaigns
Outcomes

Increases in awareness and knowledge

**Preventive chemotherapy and transmission control (PCT)**
- Seek diagnosis and increase case detection
- Seek and comply with MDT and MDA treatment

**Vector ecology and management**
- Elimination of breeding places for dengue vector
Findings

Outcomes

WASH
- Reduce exposure to infected water
- Changing water-related behavior
- Filtering and boiling water
- Avoiding ulcer contact with water sources
- Hygiene practices (e.g. Hand-washing, food hygiene)
Conclusions

- 8/17 WHO priority NTDs
- 3/5 WHO NTDs strategies
- Interventions do not use all SM benchmarks
  - Communication
- More impact when:
  - Part of MDA interventions
  - Strong community and government involvement
Limitations

- Waiting to receive some papers for full-text screening
Next steps

▪ Application of the:
  ▪ Hierarchical Model of Social Marketing
  ▪ WHO Gender Responsive Assessment Tool (GAT)
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