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An assessment of HIV control programme for evidence informed policymaking and practice in Burkina Faso: A systematic review

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Abstract

Background: Several studies have been undertaken on the subject of HIV. To improve the research findings into practices, stronger scientific evidences are suitable and have improved HIV control programmes in many countries including Burkina Faso. The objective of this study is to review the various HIV/AIDS researches related to HIV control programme in Burkina Faso and their implication for policy and practice.

Methods: This study was a systematic review. A MEDLINE Entrez PubMed search was performed in August 2019 and implementation studies that investigated HIV control programmes and HIV health policy in Burkina Faso. Search key words included « HIV programmes in Burkina Faso », « HIV control programme in Burkina Faso », « Burkina Faso, health policy, HIV ». Only policy relevant studies which generated evidence to improve HIV control prgramme in Burkina Faso were eligible and were selected.

Results: A total of 23 relevant studies that fulfilled the study inclusion criteria were identified out of 89 studies found. Among the 23 scientific publications included in the review, 73.9% were published in English language and 26.1% in French language. The main issues reviewed were related to prevention and other topics associated to prevention as an intervention on HIV control programme already operated in Burkina Faso, related to monitoring and evaluation to better control HIV programme. Others included studies were related to prevalence and risk factors, stigma, access to care to Non-gouvernmental-organizations-(NGO), access to and quality of care, gender, service delivery, priority setting and resource allocation. These studies generated high quality policy relevant evidence which indicated significant improvements in HIV programmes outcomes where the studies were undertaken

Conclusion: There is a need for more implementation of research related to HIV in low income settings because of the priority to improve HIV outcomes and the challenge for implementing research and equity issues for interventions within complex health systems.

Background

According to the World Health Organization (WHO), better use of research evidence for development policymaking can save lives through more effective policies that respond to scientific and technological advances, more efficient use of resources and better meet citizens' needs (1). In most developing countries, such as Burkina Faso, the main challenging issues related to evidence-to-policy is the availability and the use of research evidence (2, 3). According to Lavis and colleagues, there is a growing interest in interactive knowledge-sharing mechanisms to bring together research results with the tacit views, experiences and knowledge of those who will be involved in or affected by future decisions on high priority issues.(4). From this interest, it is necessary to provide "decision support" that takes into account at the local context for decision-makers and other stakeholders (5, 6). Locally contextualised decision support is a skills gap to be filled, particularly in low- and middle-income countries (LMICs) where health systems are weak and where policies are weakly evidence-based. (7).

According to Whitworth and colleagues, implementation research should be taken into account by decision-makers and implementers in order to improve decision-making (8). Although implementation research is relatively new, it is increasingly in demand as it can help to maximize the beneficial impact of health interventions (9). With the increase in implementation research related to HIV and its co-infections worldwide, stronger scientific evidence are now available and have helped to improve HIV programme policies in many countries.

Located in the WHO African Region, Burkina Faso is a landlocked country in West Africa with 274, 200 square kilometers and an estimated population of 15, 224, 780, having one of the world's lowest gross domestic products per capita and faces a generalized human immunodeficiency virus (HIV) epidemic (10). The Human immunodeficiency virus infection and acquired immune deficiency syndrome (HIV/AIDS) prevalence rate, in the space of 30 years (between 1986 and 2016), has reduced from 7–0.80% (11). And about 95, 000 [79, 000–120, 000] have been declared Person living with HIV infection (PLWA) in 2015. HIV prevalence among pregnant women aged 15–49 has decreased by 72% in urban areas, from 7.1% in 1998 to 2.0% in 2014, and by 75% in rural areas, from 2.0% in 2003 to 0.5% in 2014 (12). The HIV/AIDS prevalence rate is estimated at 0.8% [0.7% – 1.0%] in 2015 and is not stated in HIV epidemic context (11).

Although this reduction in HIV/AIDS morbidity and mortality in Burkina Faso could be attributed to implementation of various intervention policies, it is however not very clear as to what extent the policies were informed by research evidence from implementation research. Some implementation research has been able to evaluate specific components of the HIV program for more evidence for policy use. Indeed, a multicentre evaluation study, including Burkina Faso, examined only "Prime ; ethics on the ground" (13). The second was the conceptualization of the effects of task shifting using a systems approach and exploring these effects with regard to HIV in Burkina Faso as a case study (14). The challenges remained for the HIV national programme are to improve the outcomes as well as producing and capitalizing research evidence. Till todate, no attempt has been made to review implementation studies related to HIV control programmes in order to understand the extent of the evidence generated informed for better health policy. The objective of this study is to review the various HIV/AIDS researches related to HIV control programme in Burkina Faso and their implication for policy and practice.

Methods

Search strategy

A MEDLINE Entrez Pubmed search was performed in September 2019 and studies published in English and French that investigated studies related to HIV control programmes and HIV health policy in Burkina Faso.

The keywords used for the search included: « HIV programmes in Burkina Faso », « HIV control programme in Burkina Faso », « Burkina Faso, health policy, HIV »; these yielded 201 entries (Figure 1).

Eligibility criteria

The 201 publications were reviewed to meet the following study inclusion criteria:

1. must have been conducted in Burkina Faso;
2. must be in English or in French;
3. must be a primary scientific investigation and not a review article;
4. must target HIV patients/participants or HIV and its opportunistic infections;
5. must clearly address health issue of policy relevance to Burkina Faso;

Of the 201 publications found, a total of 23 (11.4%) fulfilled these study inclusion criteria and were included in this review (Figure 1).

Data extraction and analysis

The selected publications were categorized according to the following information: Author/year of publication; Language used for publication; Type of study; Study setting/location; Main issues reviewed; Main findings; Policy implication/recommendations (Tables 2-4).

The selected publications were reviewed to provide additional vital information for this paper.

Results

This review study included 11.4% of the 201 scientific publications identified from the literature search. Regarding HIV in the 23 scientific publications included in the review, there were 73.9% of them published in English language and 26.1% in French language.

Regarding the main issues reviewed, seven identified scientific publications (15–21) reported the prevention and others topics associated to prevention as an intervention on HIV control programme already operated in Burkina Faso (Tables 1–4). Three articles (10, 22, 23) reported the implemented monitoring and evaluation to better control HIV programme (Tables 1, 2 and 4). Others included studies were related to prevalence and risk factors, stigma, access to care and to NGO, access and quality of care, gender, service delivery, priority setting and resource allocation (Tables 1–4).

As well, 28.6% were multicentric countries studies amongst the 21 scientific publications (Table 1). Inside, the main settings/locations of the studies were Ouagadougou (the capital city) and Bobo Dioulasso (the second big town city) and accounted for 48.0% (Table 1). The national wide setting was concerned by one study. In 26.1% of the scientific publications, the setting was not stated (Table 1). Most of the studies were cross-sectional studies.

These studies generated gave various information about the HIV control programme outcomes in localities and health facilities where the studies were undertaken. That indicated significant improvements in HIV programmes outcomes where the studies were undertaken.

Discussion

This review was designed to provide more insight into the process of evidence-informed policymaking based on implementation research regarding HIV control programme in Burkina Faso.

In accordance with what was already declared by Uneke and colleagues (7), implementation research remains one of the most effective processes for available or new health interventions for improving their access and use to improve programs. All the studies reviewed reported relevant relevant contribution to improving outcomes of HIV control programme. And almost all were cross-sectionl studies and depending on the type of the keywords used for the search.

It is of interest to note from this review that all of 21 selected studies were published after the year 2000. The annual mortality rate per 100,000 people living with HIV/AIDS in Burkina Faso has decreased by 52.9% since 1990, corresponding to an average of 2.3% per year; with a first significant decrease in 2000 for Burkina Faso and in 2005 for West African countries (24). The research results explain to what extent there has been a reduction in the morbidity and mortality rate related to HIV and HIV/AIDS prevalence over 30 years from 7% in 1986 to 0.8% 2016 (11). According to WHO (25), Implementation research is one of the most important interfaces between the availability of tools, strategies and interventions and their use in health systems and control programs. From this perspective, two main ideas are possible: what we have learned from the reduction of HIV/AIDS prevalence and what could be targeted in perspective.

From the present review, policy implementation was related to comprehensive health systems strengthening (HSS) as a strong vision (26), using holistic approach (including social sciences) (27), and with clear strategy and commitment from national and international decision makers (26). These desirable health systems could consider appropriate psychology as part of the care of people living with HIV (PLWHA), taking into account community-based organizations as suggested by Ky-Zerbo and colleagues (28). In addition for Bila and colleagues, a better understanding of the interaction between gender, HIV and the institutional organization of health care could help reduce men's reluctance to attend health care facilities (29). With the genre and equity perspectives, some authors showed that HIV control programmes have to target interventions among young female sex workers (FSW) mainly for part-time sex workers (PTSW) and their partners. From the learning from teachers, it emerged that the specific HIV prevention programmes in the education sector that specifically target women were needed (30). Indeed, the results showed that there is still a need to address stigma and discrimination, in particular the training of health care providers and law enforcement officials, and to authorize, fund, guide and monitor services for key populations. (31). Moreover, there is an urgent need to consider HIV prevention strategy in combination or not with other strategies for the general and key population: targeting prisoners, female sex workers (FSW) mainly for part-time sex workers (PTSW) and their partners (30), using HIV prevention campaigns, using Communication and Behavior Change (CBC) programme by peer-advisers (21). From the side of service delivrey, healthcare facilities have to offer a HIV continuum of care to key populations (32), to provide HIV testing and counselling including better protections against HIV exposure in the workplace, to follow HIV guidelines including ethical issues (33), and include care related to HIV co-infection and its consequences (34). Moreover, there is a need for strong quality implementation of prevention of mother-to-

child transmission programmes (16, 18, 19) and for this to contribute to WHO guidelines. (18). According to Vergne and colleagues (22), the monitoring of antiretroviral (ARV) resistance in the population is necessary and should be included in all implementation programmes. That was the same concern from Somda and colleagues who call for closer monitoring of the antiretroviral therapy (ART) programme (10). Finally, for Windisch and his colleagues, integrating HIV/AIDS funding and responses into health systems is crucial from the outset to meet the challenge of sustainability (35); in particular support for training, supervision and infrastructure upgrading.

From this systematic review, we learned that some topics are insufficient or missing in research on HIV programme: HIV status of health workers and human resources shortage and competences; Equity analysis; Access to care; Quality of care; Quality of life and social approach in the health systems; Topics related to Health policy. In addition about this review, non-governmental organizations (NGOs) have been included in the HIV programme mainly for prevention. However, several regions of Burkina Faso have not been the subject of HIV research. And, there is insufficient monitoring and evaluation of HIV programme components at the country level.

One very interesting feature of all the studies reviewed is that they gave various information about the HIV control programme outcomes in localities and health facilities where the studies were undertaken. There is still a need to identify what works in rural community settings. According to WHO, implementation research will provide evidence for the adoption and optimal use of innovations for scaling up and increased engagement and investment (25). From this perspective, recommendations can be made in order to improve HIV control programme in Burkina Faso (Box 1). The recommendations have to be reviewed in accordance with WHO guidelines on the core elements of infection prevention and control (IPC) programmes at the national level and in the health care settings. (36). In this perspective, equity analysis could be taken into account through appropriate approaches (37, 38), and including strengthening multisectoral collaboration and partnerships when implementing and monitoring strategies and programmes (37).

Study limitations

As already stated by Uneke and colleagues in their study (7), this study had two main limitations. The first one is the exclusive use of PubMed for data extraction, one of the most remarkable and easily evaluable databases in the world for health science publications. Its unique use may have resulted in the absence of additional relevant publications. The second limitation of this study concerns the scope (Burkina Faso) of the publications reviewed giving an inappropriate to generalize the results.

Conclusion

There is a need for more implementation of research related to HIV in low income settings because of the priority for improving HIV outcomes and the challenge for implementing research and equity issues for interventions within complex health systems.

List Of Abbreviations

AIDS
Acquired immune deficiency syndrome
ART
Antiretroviral treatment
CBC
Communication and behavior change
CI
Confident interval
FSP
Food support programme
FSW
Female sex worker
HIV
Human immunodeficiency virus infection
HSS
Health system strengthening
LMICs
Low and middle income countries
MSM
Man having sex with man
NGO (s)
Nongovernmental organization (s)
NRTI
Nucleoside reverse transcriptase inhibitors
PHC
Peripheral health centres
Pis
Protease inhibitors

PLWHA
Person, living with HIV affection
PMTC
Prevention of mother-to-child transmission of HIV
PTSW
Part-time sex worker
SW
Sex worker
TB
Tuberculosis
TDR
Transmitted drug resistance
WHO
World health organization

Declarations

Ethics approval and consent to participate

Not applicable

Consent to publish

Not applicable

Availability of data and materials

Data set used for this report can be availed by the corresponding author on reasonable request.

Competing interests

The authors declare that they have no competing interests.

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Authors' contributions

M-ZC conceived the study and the first draft of the manuscript. C-O, H-MH, H-L and S-I helped to write and to review the first draft of the manuscript. And M-ZC, S-I, T-I and S-GBL, worked on the final version of the manuscript. All authors read and approved the final manuscript.

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Tables

Tableau I. Distribution of the publications by language of publication, according to the main issues reviewed and setting/location

Items	Number (n=23)	Percent (%)
Language of publication		
· Article in English	17	73,9
· Article in French	6	26,1
Main issues reviewed		
· Prevalence and factors	2	8,7
· Stigma	3	13,0
· Access to care to NGO, access and quality of care	2	8,7
· Monitoring and evaluation	3	13,0
· Gender	2	8,7
· Service delivery	2	8,7
· Prevention, prevention and access, prevention and equity, diagnosis and prevention, prevention by treatment	7	30,4
· Priority setting	1	4,3
· Resource allocation	1	4,3
Setting/location		
· Multicentric countries studies	6	26,1
· National wide	1	4,3
· One area/part in Burkina Faso	14	60,9
· Burkina Faso but not stated in detail	2	8,7
Setting/location of the studies in Burkina Faso (inside or national wide)		
· National wide	1	4,3
· Ouagadougou (Region of Centre)	5	21,7
· Bobo Dioulasso (Region of Hauts Bassins)	6	26,1
· Ouagadougou and other regions or provinces	4	17,4
· Other regions or provinces (not ouagadougou and not Bobo Dioulasso)	1	4,3
· Not stated in Burkina Faso	6	26,1

Tableau II. Profile and characteristics of scientific publications from the key word « HIV programmes in Burkina Faso » related to the assessment of HIV control programme in Burkina Faso

hor and year publication	Language used for publication	Type of study	Study setting/ Location	Main issues reviewed	Main findings	Policy implication/ recommendations
Zerbo et al, 4 [18]	French	Cross-sectional	Burkina Faso (Ouagadougou and Dédougou)	Stigma	-Internal stigma by Person living with -HIV affection PLWHA) = (46%) -Interpersonal stigma = 40% for and stigma in health care facilitie=11%	Need for more appropriate psychology in the care of people living with HIV/AIDS, particularly in community-based organizations.
ı and Egrot, 9 [19]	English	Qualitative	Burkina Faso (Not stated detail in the country)	Gender and decision-making processes of both sexes around therapeutic choices	Health policies and social contribute to promote women's participation in health care facilities. In addition, the cultural construction of men creates a reluctance to attend health care facilities	Interaction between gender, HIV and institutional health care organization to reduce men's reluctance to attend health care facilities.
oré et al, 6 [20]	English	Cross-sectional	Burkina Faso (Ouagadougou)	Evaluation of HIV control programmes	Aware of their HIV status: 6.5% High-risk behaviours 45.6% reported that women were mainly part-time sex workers (PTSW) who used non-systematic condoms with regular partners.	Implementation of interventions for young sex workers (FSWs), mainly part-time sex workers (PTSWs), and for their regular HIV testing.
ıkoya-ıadoulougou l, 3 [21]	English	Cross-sectional	Burkina Faso (National survey)	Prevalence of HIV amongst teachers	Prevalence was 1.0% (95% CI : 0.4-1.2) in male teachers, 2.5 times lower than among men in the general population, and it was 3.5% (95% CI : 2.5-5.2) in female teachers, 1.7 times higher than in Demographic Health Survey women.	Need of the implementation of specific HIV prevention programmes in the education sector and targetting women.
ıiskens et 2 [22]	English	Qualitative	Five sub-Saharan countries : Burkina Faso, the Democratic Republic of Congo, Ghana, Madagascar and Malawi (Not stated detail by country)	Priority Setting	Health priorities about malaria and HIV and had gaps in service delivery. Priority setting influenced by international agendas and health system challenges not in global statistics	Need or disease-specific programs and more for comprehensive health systems strengthening (HSS) as a strong vision and a clear strategy and commitment from national and international decision-makers
thé et al, 8 [23]	French	Qualitative	Burkina Faso (Bobo Dioulasso)	Prevention	Illegal sex workers, especially young women, who are uneducated, poor and forced to work early, including in the sex trade	Need for implementing adaptive HIV prevention programmes targeting formal or professional sex work and mainly involving their partners
gne et al, 6 [24]	English	Not stated	Burkina Faso and Cameroon (Not stated by country)	Surveillance, monitoring and evaluation	Existence of mutations conferring resistance to ARV class antiretroviral drugs: two to nucleoside reverse transcriptase inhibitors (NRTIs), four to non-INTIs and two to protease inhibitors (Pis)	Monitoring of population resistance to antiretroviral drugs is necessary and should be included in all implementation programmes.
ła et al, 6 [25]	English	A mixed focus group and cross sectional study	Region of Hauts Bassins (Burkina Faso)	Stigma and social expression of TB and HIV	-Misconceptions effects still have havy social impact on TB and HIV patients -Too suitable health education towards patients and healers, inside communities, in health centers and NGOs and associations, and for specific settings	Psychosocial and nutritional support crucial for better treatment adherence outcomes.

Tableau III. Profile and characteristics of scientific publications from the key word « HIV control programme in Burkina Faso » related to the assessment of HIV control programme in Burkina Faso

hor and ear of lication	Language used for publication	Type of study	Study setting/ Location	Main issues reviewed	Main findings	Policy implication/ recommendations
nes et 2010	English	Cross-sectional	Burkina Faso (Bobo Dioulasso)	Prevention : giving nutrition helping prevention of mother-to-child transmission (PMTCT)	Food support programme (FSP) encouraged breastfeeding mothers to cease by 6 months.	Food security of non-breastfed infants have to be addressed in HIV prevention of mother-to-child transmission (PMTCT) programme
édraogo l, 2015	French	Cross-sectional	Burkina Faso (Ouagadougou)	Prevention and equity	Prison conditions, homosexual behaviour and absence of condoms in prison accentuate the vulnerability of prisoners to HIV/AIDS.	Implementation an management of HIV programmes in prisons in order to reduce risk of HIV transmission in prison
ne EN Meda 2014	English	Cross-sectional	Burkina Faso (Ouagadougou)	Access and quality : prevention of mother-to-child transmission (PMTCT) programmes	Insufficient coverage and quality of prevention of mother-to-child transmission (PMTCT) programme in the Centre Health Region in Burkina Faso	Need of support for training, supervision and infrastructures upgrading.
né et 4 [29]	French	Cross-sectional	Burkina Faso (Not stated in detail)	Prevention, access to HIV test in hard-to-reach population	487,727 people tested through 8 screening campaigns with 24.6 % declared HIV-positive, and reaching populations that are difficult (especially young people), at a low cost.	Synergy between community-based organizations and health services (for counselling and testing) during cost-effective HIV prevention campaigns
ho a Study up, de enzi, 1 [30]	English	Randomised Controlled Trials, ISRCTN71468401.	Burkina Faso (Bobo Dioulasso), Kenya (Mombassa and Nairobi), and South Africa (Durban and Somkhele)	Prevention by treatment for prevention of mother-to-child transmission (PMTCT) programme	Low HIV transmission when using triple antiretroviral compared to zidovudine and single-dose nevirapine at 6 and 12 months.	Triple antiretroviral prophylaxis for mother or baby during breastfeeding if the mother not receiving antiretroviral treatment for her own health
thé A, rgens 7[31]	French	Qualitative	Burkina Faso (Bobo Dioulasso)	Prevention by communication	Possible low HIV incidence when using communication and Behavior Change (CBC) programme by peer-advisers trained for improving women's knowledge	Need to spread the Communication and Behavior Change (CBC) programme to other vulnerable populations.
da et al	English	Cross-sectional	Two main Regions (Hauts-Bassins and Centre) of Burkina Faso	Factors of Tuberculosis Infection among HIV/AIDS patients	TB risk factors among PLWHAs consisted of CD4 cell counts below 200/ µl, a history of sexually transmissible infections, and a past or present history of pulmonary asthma, and factors identified by region.	Risk factors for TB knowed and have to be incorporated into the HIV/TB control programmes

Tableau IV. Profile and characteristics of scientific publications from the key word « Burkina Faso, health policy, HIV » and by snowbolling related to the assessment of HIV control programme in Burkina Faso

hor and ear of lication	Language used for publication	Type of study	Study setting/ Location	Main issues reviewed	Main findings	Policy implication/ recommendations
de et 2 [33]	English	Qualitative	Burkina Faso (mainly Ouagadougou and Bobo Dioulasso)	Access to care in NGO	Not concrete guidelines for identifying patients warranting payment exemptions because no sociotherapeutic rationality	Non-governmental organizations (NGOs) must take into account equity of access to care and treatment for patients
land et 2016	English	Cross-sectional	Burkina Faso (Bobo Dioulasso) and Togo (Kara)	HIV Service delivrey for key populations	In Bobo Dioulasso, HIV prevalence was 32.9% of female sexual workers (FSWs) of which 55.7% were using ART (gap of using ART : 31.5% among FSWs). HIV service coverage among men who have sex with men (MSM) and female sex workers (FSWs) was low in 2013	To realize the engagement at-risk populations in the continuum of HIV care, there is a need of systematic HIV testing and evidence-based HIV treatment services
‘all et 5 [35]	English	Cross-sectional	Burkina Faso and Togo (No stated in detail by country)	Genre/equity, access to service and servicce delivery	Enabling environment and HIV prevention support policies and measures are needed for key populations who have to be part of decision-making and participate to allocation of funds for programmes that affect them.	Policies are needed to address stigma and discrimination, particularly health care provider and law enforcement training, and to authorize, fund, guide, and monitor services for key populations.
t et al, 5 [36]	English	Quantitative and qualitative	Burkina Faso, Kenya and Uganda (No stated in detail by country)	Work conditions for providers and service delivery	In terms of care, HIV health workers face serious resource constraints, are concerned about accidental exposure, are stressed by HIV contact, and have to manage the ethical dilemmas associated with clients who do not disclose their HIV status to those around them, including their partners	Need of HIV guidelines respect including ethical issues and of more resources and support for health workers for better protections against HIV exposure in the workplace.
ıdisch l, 2011	English	Cross-sectional	Burkina Faso (Ouagadougou, Nouna and Dédougou)	Resource allocation, policy making and integration of the national responses to ARV provision and reproductive health	Overlapping functions of new HIV institutions with significant imbalances and negative effects (budget allocation, strategic document planning)	Need to integrate HIV/AIDS funding and responses into health systems for sustainbility challenge.
ɡma et 2011	English	Cross-sectional	Burkina Faso (Ouagadougou)	HIV Co-morbidities and prevention	Bacterial vaginosis and mycoplasma infection affected HIV-positive women in Burkina Faso	Need to develop a policy of screening HIV Co-morbidities including bacterial vaginosis and mycoplasma infection
bo et 0 [39]	French	Qualitative	Burkina Faso (Région of Plateau central with its three health districts : Boussé, Ziniaré and Zorgho)	Stigma and HIV and tuberculosis (TB) case management	Patients deal with a negative social image (humiliation and marginalization) of both diseases (tuberculosis and HIV) and with difficult and complicated treatment.	Including social sciences in the holistic approach of the health systems is recommended when conducted public health programmes
ıda et 2 [11]	English	Cross sectional	Burkina Faso (Ouagadougou)	Monitoring and evaluation	HIV transmitted drug resistance (TDR) was moderate (5%–15%) for both nucleoside reverse-transcriptase inhibitors and nonnucleoside reverse-transcriptase inhibitors.	Need for closer monitoring of antiretroviral therapy (ART) when conducting HIV programmme.

Figures

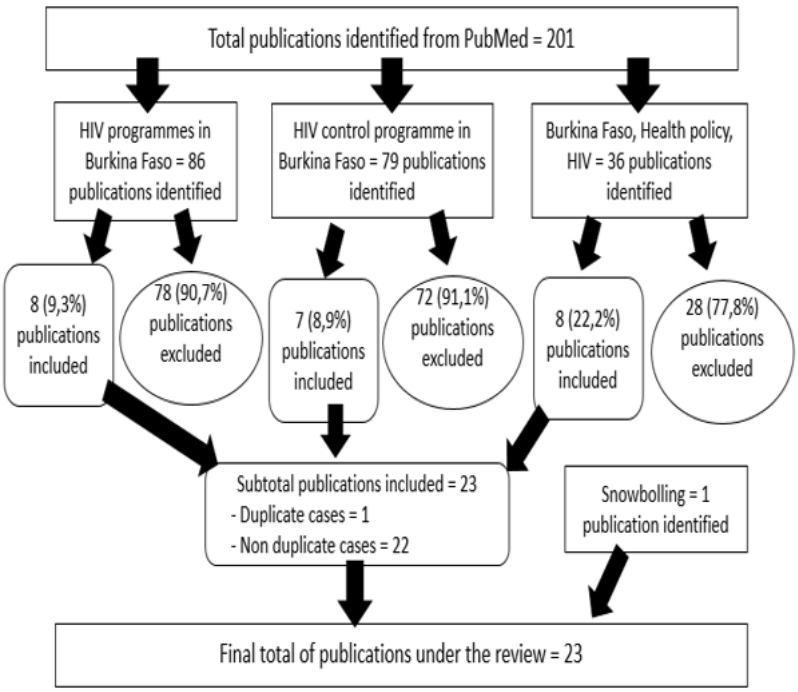


Figure 1

Flowchart of publication identification and selection process

1. Implement sensitization at the community-based level to deal with stigma and discrimination.
2. Clarify the role of the NGOS and set-up guidelines for identifying patients warranting payment exemptions in public health facilities in order to deal with equity perspective.
3. Conduct research for better understanding of the interaction between gender, HIV and the institutional organization of healthcare, which will help reduce men's reluctance to attend care facilities for Person living with HIV affection (PLWHA) and improve both prevention and treatment-oriented programmes.
4. Set-up HIV programmes targets based on results from the equity analysis and focusing particularly on part-time sex workers (PTSW), sexual behaviours with regular partners, but also female teachers.
5. Share the vision of the holistic health system by disseminating research results on HIV and other topics to policymakers for better priority perspective in public health (workshop method and its evaluation).
6. Monitor and evaluate regularly ART resistance.
7. Conduct HIV prevention campaigns when connection is easier between the NGOs and the public health facilities to support to those who will be HIV positive.

Figure 2

Recommendations from the systematic review on HIV control programme in Burkina Faso

Supplementary Files

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- PRISMAAssessmentofHIVprogrammecontrol05122019.doc