UNIVERSITAS
JENDERAL SOEDIRMAN

PANDUAN PRAKTIKUM

PENULISAN DAN PUBLIKASI ILMIAH

SYSTEMATIC REVIEW

MAGISTER KESEHATAN MASYARAKAT
FAKULTAS ILMU-ILMU KESEHATAN
UNIVERSITAS JENDERAL SOEDIRMAN

KATA PENGANTAR

Puji syukur kehadirat Allah SWT atas rahmat dan karunia-Nya sehingga Panduan Penulisan dan Publikasi Ilmiah *Systematic Review* ini dapat selesai. Panduan ini disusun untuk dijadikan pedoman dan petunjuk yang digunakan dalam Mata Kuliah Penulisan dan Publikasi Ilmiah bagi para mahasiswa Program Studi Magister Kesehatan Masyarakat Fakultas Ilmu-Ilmu Kesehatan Universitas Jenderal Soedirman Purwokerto, agar pada pelaksanaannya dapat berjalan secara terarah dan terpadu sehingga dapat mencapai tujuan yang telah ditentukan.

Kami menyadari dengan keterbatasan yang ada, panduan ini masih memerlukan perbaikan yang berkelanjutan seiring perkembangan ilmu pengetahuan. Oleh karena itu, kritik dan saran dari semua pihak sangat kami butuhkan. Kepada semua pihak yang telah membantu terealisasinya panduan ini kami ucapkan terimakasih.

Purwokerto,

Tim Penyusun

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BAB I
PENDAHULUAN

A. Latar Belakang

Modul Panduan Praktik Penulisan dan Publikasi Ilmiah *Systematic Review* ini berfungsi sebagai salah satu acuan dalam kegiatan praktikum pada mata kuliah Penulisan dan Publikasi Ilmiah. Mata Kuliah Penulisan dan Publikasi Ilmiah merupakan mata kuliah wajib pada program Studi Magister Kesehatan Masyarakat dengan jumlah 3 SKS. Mata kuliah ini membahas tentang tahapan penulisan ilmiah, perencanaan penulisan ilmiah (perencanaan penyusunan manuskrip), penelusuran kepustakaan, sistematika penulisan ilmiah, penulisan ejaan dan penyusunan kalimat efektif, sistem perujukan (sitasi) dan daftar pustaka (*reference manager*), penilaian jurnal ilmiah (*critical appraisal*), penulisan *systematic review*, publikasi artikel di konferensi dan jurnal ilmiah (penulisan *cover letter*, *acknowledgement*, pencarian jurnal/data based).

B. Tujuan

Mahasiswa mampu menulis, mempresentasikan dan mengirimkan artikel *systematic review* ke jurnal.

C. Deskripsi Kegiatan Praktikum

Pada kegiatan praktikum mata kuliah ini mahasiswa akan melakukan praktik tentang langkah-langkah penulisan dan publikasi *systematic review*.

D. Waktu Pelaksanaan Praktikum

Kegiatan praktikum dilakukan setelah penyampaian materi secara teori yang akan dijadikan kegiatan praktikum.

BAB II
PELAKSANAAN PRAKTIKUM

A. Definisi dan Tujuan *Systematic Review*

Systematic Review adalah desain penelitian yang digunakan untuk merangkum hasil beberapa penelitian (1). Sebagaimana didefinisikan dalam *Cochrane Handbook for Systematic Review of Interventions, Systematic Review* merupakan "Tinjauan sistematis berupaya mengumpulkan bukti yang sesuai dengan kriteria kelayakan yang telah ditentukan sebelumnya untuk menjawab pertanyaan penelitian tertentu. Hal tersebut bertujuan untuk meminimalkan bias dengan menggunakan metode yang eksplisit dan sistematis yang didokumentasikan sebelumnya dengan sebuah protokol." (2). Desain penelitian ini dilakukan untuk menyintesis berbagai bukti penelitian yang sudah ada sebelumnya secara sistematis, meliputi pencarian artikel penelitian, telaah kritis (*critical appraisal*), dan sintesis hasil penelitian yang selanjutnya digunakan untuk pengambilan keputusan. Desain ini mencegah kesalahan pengambilan keputusan karena dalam desain ini terdapat kriteria inklusi dan ekstraksi data, serta dapat mengurangi duplikasi penelitian atau mencegah penelitian yang tidak perlu (1).

Tujuan melakukan *Systematic Review* antara lain:

1. Menginformasikan pengambilan keputusan medis
2. Merencanakan agenda penelitian masa depan
3. Menetapkan kebijakan klinis atau kesehatan
4. Mencegah studi yang tidak perlu
5. Kemungkinan digunakan untuk penelitian efektivitas komparatif

B. Kelebihan dan Kekurangan *Systematic Review*

Berikut ini merupakan kelebihan dan kekurangan dari desain *Systematic Review* (3).

1. Kelebihan

   Kelebihan dari *Systematic Review* antara lain:

   a. Tinjauan menyeluruh terhadap literatur terkini dan sumber lain (studi yang tidak dipublikasikan, penelitian yang sedang berlangsung)
   b. Lebih murah untuk meninjau penelitian sebelumnya dibandingkan membuat penelitian baru
   c. Waktu yang dibutuhkan lebih sedikit dibandingkan melakukan penelitian baru

d. Hasil dapat digeneralisasi dan diekstrapolasi ke populasi umum secara lebih luas dibandingkan penelitian individual
e. Lebih dapat diandalkan dan akurat dibandingkan penelitian individual
f. Dianggap sebagai sumber daya berbasis bukti

2. Kekurangan

Kekurangan dari *Systematic Review* antara lain:

a. Sangat memakan waktu
b. Mungkin tidak mudah untuk menggabungkan studi

C. Karakteristik *Systematic Review*

Berikut ini adalah perbedaan karakteristik dari *Systematic Review* (SR), *Scoping Review* (ScR) dan *Narrative Review* (NR) (4).

Tabel 1. Perbedaan dari *Systematic Review* (SR), *Scoping Review* (ScR) dan *Narrative Review* (NR)

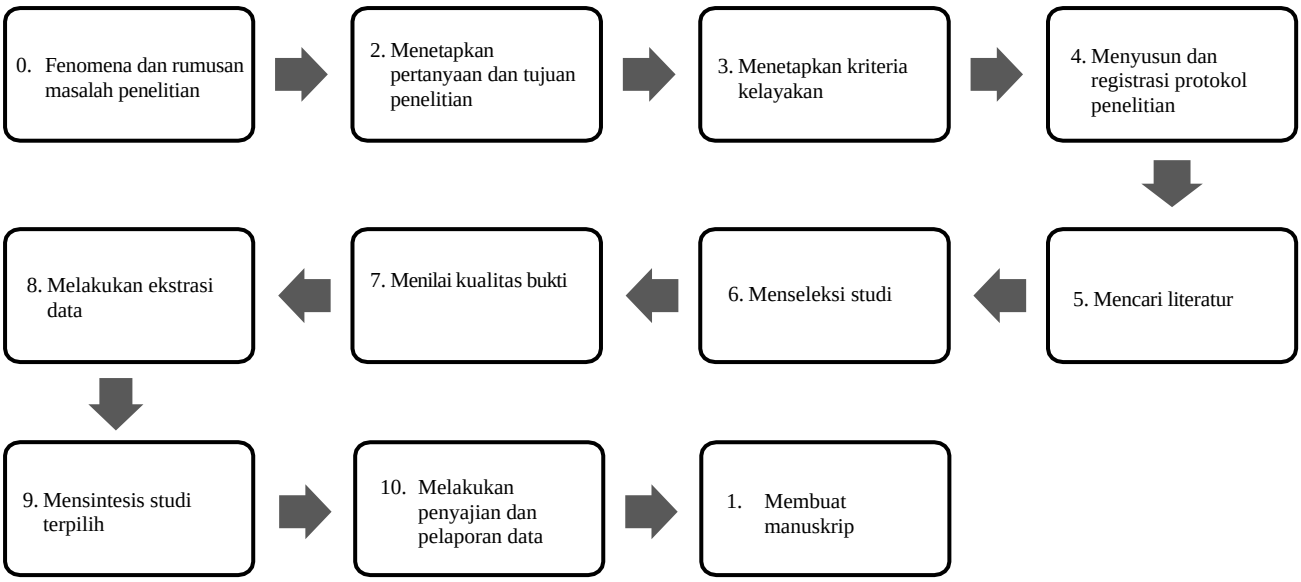
Aspek	SR	ScR	NR
Pertanyaan Review	Spesifik (*Population Intervention Comparison Outcome/Population Exposure Comparison Outcome*) Hasilnya dipakai untuk bahan pengambilan keputusan	Umum (*Population, Content, Context*). Pertanyaan terkait dengan pemetaan konsep/definisi. Sebagai awal (precursor) untuk *systematic review*.	Pertanyaan review dapat bersifat umum atau spesifik. Biasanya dibuat oleh pakar pada topik yang sesuai.
Proses pencarian literature	Sistematik	Sistematik	Tidak ada panduan
Proses critical appraisal	Sistematik	Tidak diwajibkan	Tidak ada panduan
Synthesis	Syntesis kualitatif dengan/ tanpa sinthesis kuantitatif (meta-analysis)	Synthesis secara kualitatif	Tidak ada panduan
Panduan	Guideline penulisan: PRISMA	PRISMA-ScR	NA (*Instrumen penilaian mutu: SANRA)

Tabel 1 menunjukkan bahwa desain *Systematic Review* (SR) memiliki karakteristik pertanyaan yang diajukan lebih spesifik dibandingkan dengan *Scoping Review* (ScR) dan *Narrative Review* (NR). Proses pencarian literatur untuk SR dan ScR dilakukan secara sistematik sedangkan NR tidak ada panduannya. Hanya SR yang

proses *critical appraisal* dilakukan secara spesifik. Proses sintesis dilakukan secara kualitatif dengan atau tanpa sintesis kuantitatif (*meta-analysis*) sedangkan ScR hanya secara kualitatif dan NR tidak memiliki panduannya. Panduan dalam penyusunan protokol dan laporan hasil SR menggunakan *Preferred Reporting Items for Systematic reviews and Meta-Analyses* (PRISMA) sedangkan ScR menggunakan PRISMA-ScR dan NR menggunakan instrumen penilaian mutu SANRA.

D. Langkah-langkah *Systematic Review*

Bagan berikut ini adalah langkah-langkah dalam melakukan *systematic review* (5).



Gambar 1. Langkah-langkah *systematic review*

Contoh penerapan langkah-langkah dalam melakukan *systematic review* adalah topik penelitian mengenai cakupan dan kualitas pencegahan penularan HIV dari ibu ke anak yang dimuat dalam artikel berjudul "*Factors Influencing Coverage of Elimination Mother to Child Transmission of HIV: A Systematic Literature Review*" oleh Rikawarastuti, Siregar, dan Hanifah (2021) (6). Berikut adalah langkah-langkah dalam melakukan *systematic review* (5).

0. Langkah 0: Fenomena dan rumusan masalah penelitian

Fenomena yang ditemukan adalah masih tingginya penularan HIV dari ibu ke anak di Indonesia. Cakupan tes HIV ibu hamil di layanan ANC di Indonesia selalu rendah dari tahun ke tahun. Fenomena ini harus didukung dengan data dari sumber yang akurat.

Rumusan masalah penelitian yaitu cakupan tes HIV pada ibu hamil yang berkunjung ke layanan ANC selama ini masih rendah yang diduga karena rendahnya kualitas program Pencegahan Penularan HIV dari Ibu ke Anak (PPIA) terutama di Puskesmas.

1. **Langkah 1: Menetapkan pertanyaan dan tujuan penelitian**

Identifikasi pertanyaan dan tujuan penelitian menggunakan formula PICOS.

Tabel 2. Formula PICOS

P	*Patient/ problem/ population*	Ibu hamil di layanan ANC *Pregnant woman + antenatal care*
I	*Intervention*	Program PPIA PMTCT HIV *(Prevention Mother to Child Transmission of HIV)*
C	*Comparative*	Negara berkembang atau negara maju *Developing countries OR Developed countries*
O	*Outcome*	Cakupan dan kualitas program PPIA ANC: Persentase ibu hamil yang datang ke ANC minimal satu kali. Persentase ibu hamil mendapat konseling sebelum tes HIV, persentase ibu hamil mendapat tes HIV, persentase ibu hamil yang mengetahui status hasil tes HIV, persentase ibu hamil yang mendapat konseling pasca tes HIV, persentase ibu hamil HIV positif mendapat terapi ARV. *Coverage and Quality* *ANC: Percentage of pregnant women who had ANC visit at least once, Percentage of pregnant women who received pre-HIV test counselling, Percentage of pregnant women who received their test result, Percentage of pregnant women received post HIV test counselling, Percentage of pregnant women received ARV therapy.*
S	*Studies*	Semua studi All studies

Sumber: Siregar dkk, 2021

Pertanyaan penelitian:

a. Mengapa cakupan dan kualitas program PPIA, terutama cakupan tes HIV pada ibu hamil rendah di layanan ANC?
b. Sejauh mana capaian cakupan dan kualitas program PPIA di negara berkembang maupun di negara maju?
c. Faktor-faktor apa saja yang berhubungan dengan rendahnya cakupan tes HIV pada ibu hamil tersebut?

Tujuan penelitian:

Tujuan penelitian adalah untuk mengetahui tingkat cakupan dan kualitas program PPIA yang diintegrasikan dalam layanan ANC di negara berkembang dan negara maju, untuk mengetahui faktor-faktor yang berhubungan dengan rendahnya cakupan tes HIV ibu hamil di layanan ANC, serta untuk menilai sejauh mana kesenjangan yang ada antara tujuan program dengan implementasinya.

2. **Langkah 2: Menetapkan kriteria kelayakan**

Tetapkan kriteria kelayakan inklusi dan eksklusi berdasarkan PICOS.

Tabel 3. Kriteria kelayakan inklusi dan eksklusi berdasarkan PICOS

	Inklusi	Eksklusi
Source	*Proquest, Ebsco, Pubmed, SpringerLink*	*Other databases*
Dates	*1 April 2009 – 1 April 2019*	*Studies published before or after this periode*
Language	*English*	*Other languages*
Population	*Pregnant woman + antenatal care*	*Other*
Intervention	*PMTCT HIV*	*Other interventions*
Comparative	*Developing countries OR Developed countries*	*Other*
Outcome measure	*Coverage and quality* *ANC: Percentage of pregnant women who had ANC visit at least once, Percentage of pregnant women who received pre-HIV test counselling, Percentage of pregnant women who received their test result, Percentage of pregnant women received post HIV test counselling, Percentage of pregnant women received ARV therapy.*	*Other*
Study/studies	*All type of study*	-
Type of Publication	*Academic Journal and availability of documents (free) and published through the area of public health*	*Other publication and paid*

Sumber: Siregar dkk, 2021

3. **Langkah 3: Menyusun dan registrasi protokol penelitian**

Langkah selanjutnya adalah menyusun dan registrasi protokol *systematic review* yang direncanakan. Pada tahap ini peneliti perlu melakukan penelusuran secara cepat yang bertujuan untuk memastikan belum ada *review* yang serupa ataupun yang sedang dalam proses SR. Pengecekan protokol SR dapat dilakukan di alamat-alamat website berikut:

Cochrane Centre and Library (https://cochrane.co.uk/en/clib.html) Centre for Reviews and Dissemination (University of York) (www.york.ac.uk/imst/crd), Cochrane Qualitative Research Methods Group (www.cqrmg.cochrane.org), Trip Database (www.tripdatabase.com), dan Campbell Collaboration (www.campbellcollaboration.org).

Apabila telah memastikan bahwa belum ada *review* yang serupa, kemudian buatlah protokol *systematic review* sesuai panduan protokol *systematic review* berdasarkan Cochrane dan PROSPERO.

4. **Langkah 4: Mencari literatur**

a. Tentukan kata kunci:

Antenatal care, PMTCT HIV, coverage, quality

b. Identifikasi sinonim persamaan kata kunci:

PMTCT atau *EMTCT*

c. Identifikasi singkatan:

Antenatal care atau ANC

d. Cari literatur dengan logika Boolean:

Logika yang digunakan adalah *antenatal care AND pmtct hiv AND coverage AND quality*

e. Catat dan dokumentasi hasil pencarian literature

1) Sumber Proquest = 199 artikel

Query: (antenatal care) AND (PMTCT HIV) AND coverage AND quality

URL: https://search.proquest.com/index

Hasil:

Tabel 4. Hasil pencarian literature di Proquest

Filter	**Jumlah Jurnal**
Sebelum di *filter*	1206
Filter fulltext	1143
Filter: fulltext + Peer review	643
Filter: fulltext + Peer review + Source type: scholary journals	643
Filter: fulltext + Peer review + Source type: scholary journals + dates 10 April 2009 – 10 April 2019	607
Filter: fulltext + Peer review + Source type: scholary journals + dates 10 April 2009 – 10 April 2019 + English language	607
Filter: fulltext + Peer review + Source type: scholary journals + dates 10 April 2009 – 10 April 2019 + English language + subject Pregnancy	199

Sumber: Siregar dkk, 2021

2) Sumber Ebsco = 4 artikel sesuai inklusi 1

Query: antenatal care AND pmtct hiv

URL: http://web.a.ebscohost.com/

Hasil:

Tabel 5. Hasil pencarian literature di Ebsco

Filter	**Jumlah Jurnal**
Sebelum di *filter*	10
Filter fulltext	7
Filter: fulltext + Peer review	4
Filter: fulltext + Peer review + dates 10 April 2009 – 10 April 2019	4
Filter: fulltext + dates 10 April 2009 – 10 April 2019 + Source type: scholary journals +	4

Sumber: Siregar dkk, 2021

3) Sumber Pubmed = 12 artikel sesuai inklusi 1

Query: ((("prenatal care"[MeSH Terms] OR ("prenatal"[All Fields] AND "care"[All Fields]) OR "prenatal care"[All Fields] OR ("antenatal"[All Fields] AND "care"[All Fields]) OR "antenatal care"[All Fields]) AND (pmtct[All Fields] AND ("hiv"[MeSH Terms] OR "hiv"[All Fields])))

AND (“AHIP Cover”[Journal] OR “coverage”[All Fields])) AND quality[All Fields]

URL: https://www.ncbi.nlm.nih.gov/pubmed/advanced

Hasil:

Tabel 6. Hasil pencarian literature di Pubmed

Filter	**Jumlah Jurnal**
Sebelum di *filter*	17
Filter: free fulltext	13
Filter: free fulltext + dates 10 April 2009 – 10 April 2019	12
Filter: free fulltext + dates 10 April 2009 – 10 April 2019 + journal article	12
Filter: free fulltext + dates 10 April 2009 – 10 April 2019 + journal article + English	12

Sumber: Siregar dkk, 2021

4) Sumber SpringerLink = 152 artikel sesuai inklusi 1

Query: antenatal care ANC pmtct hiv AND coverage

URL: https://link.springer.com/search

Hasil:

Tabel 7. Hasil pencarian literature di SpringerLink

Filter	**Jumlah Jurnal**
Sebelum di *filter*	416
Filter: full text	304
Filter: full text + source type scholary journals	302
Filter: full text + source type scholary journals + dates 2009 - 2019	285
Filter: full text + source type scholary journals + dates 2009 – 2019 + English language	285
Filter: full text + source type scholary journals + dates 2009 – 2019 + English language + subdisiplin Public Health	152

Sumber: Siregar dkk, 2021

Hasil pencarian literatur dengan menjaring artikel-artikel yang memenuhi kriteria inklusi yaitu sebagai berikut:

Tabel 8. Hasil pencarian literatur dengan menjaring artikel-artikel yang memenuhi kriteria inklusi di beberapa database

Sumber Database	**Jumlah**
Proquest	199
Ebsco	4
Pubmed	12
SpringerLink	152
Jumlah	367

Sumber: Siregar dkk, 2021

5. Langkah 5: Menseleksi studi

Saring artikel melalui cek duplikasi dan penilaian kriteria kelayakan.

Cek duplikasi

Cek duplikasi artikel dengan menggunakan reference manager Mendeley adalah sebagai berikut:

1) Buat folder tiap database di Mendeley
2) Folder dibuat sesuai dengan database yang digunakan
3) Download artikel yang terjaring dari setiap database dan masukkan sesuai folder database
4) Lakukanlah pengecekan duplikasi artikel

   Terdapat 367 artikel yang tersaring dari 4 database dan setelah dilakukan cek duplikasi terdapat 4 artikel yang harus digabungkan atau di *merge* karena duplikasi sehingga jumlah artikel setelah artikel duplikat dibuang adalah menjadi 363. Cara untuk menghilangkan duplikat klik *Confirm Merge* hingga tidak ada lagi duplikat. Duplikasi yang terjadi adalah karena adanya artikel yang berada di dalam 2 database yang berbeda dan ada artikel yang diterbitkan dua kali tetapi berada dalam satu database yaitu 1 kali hanya memuat judul dan abstrak dan 1 kali dengan *full text*.
5) Membuat folder baru kembali untuk setiap database sebagai tempat artikel yang sesuai dengan filter PICOS. Hal ini dilakukan agar apabila ada artikel yang di delete ketika proses penyaringan, penulis masih mempunyai semua artikel yang telah diperoleh.

Kriteria Kelayakan

Lakukan dua tahapan untuk penentuan kriteria kelayakan, yaitu filter artikel secara manual, lalu lakukan penilaian dengan menggunakan format Kriteria Seleksi Artikel. Filter artikel secara manual dilakukan oleh dua orang di mana masing-masing penilai membaca judul dan abstrak secara detail dan berulang untuk menemukan artikel yang sesuai dengan PICO. Setelah itu, penilai memberikan penilaian menggunakan format Kriteria Seleksi Artikel. Dari hasil perhitungan statistik Kappa pada studi *systematic review* ini diperoleh hasil 0,61 sehingga hasil penilaian menunjukkan bahwa terdapat 12 artikel yang tersaring dan memenuhi kriteria kelayakan.

Setelah diperoleh artikel yang sesuai dengan PICO, kemudian di filter berdasarkan full text. Berikut hasil penyaringan artikel yang sesuai dengan PICO dan selanjutnya difilter berdasarkan full text.

Tabel 9. Hasil penyaringan artikel yang sesuai dengan PICO dan selanjutnya difilter berdasarkan full text

No	Sumber jurnal	Jumlah awal	Duplikat	Tidak sesuai PICO	Exclude *systematic review*/ study protocol	Sisa jurnal	Full text
1	ProQuest	199	1	179	10	9	9
2	Ebsco	4	0	4	0	0	0
3	Pubmed	12	1	9	0	2	2
4	SpringerLink	152	2	143	6	1	1
Total		367	4	335	16	12	12

Sumber: Siregar dkk, 2021

6. Langkah 6: Menilai kualitas studi

Penilaian kualitas studi *systematic review* ini mengadopsi ceklist CEBM. Hasilnya adalah total skor yang diperoleh 12 artikel tersebut lebih atau sama dengan 68% (8 pertanyaan dijawab ya/lengkap) sehingga artikel dinilai menjadi artikel terpilih.

7. Langkah 7: Melakukan ekstrasi data

a. Tentukan informasi apa saja yang relevan dengan pertanyaan, tujuan penelitian, dan PICO. Informasi yang dicari dalam penelitian *systematic review* ini antara lain karakteristik artikel, cakupan dan kualitas program PPIA/PMTCT, dan faktor-faktor yang berhubungan dengan rendahnya cakupan tes HIV pada ibu hamil di layanan ANC.

b. Buatlah tabel ekstraksi data seperti berikut ini.

Tabel 10. Format ekstraksi data karakteristik artikel

No	Author/ Year	Study Period	Country	Method	Sampling Method	Sample Size	Data Set

Sumber: Siregar dkk, 2021

Tabel 11. Format ekstraksi data faktor-faktor yang berhubungan dengan tes HIV dan cakupan ANC EMTCT Cascade

No	Author/ year	ANC EMTCT Cascade (%)							Factors related of HIV testing
		Had ANC visit at least once	Received pre-HIV test counselling	Advised get tested for HIV	Tested for HIV	Tested for HIV and received the test result	Received post HIV test counselling	ARV Therapy	
1									
Dst									

Sumber: Siregar dkk, 2021

Kemudian isi tabel ekstraksi data dengan membaca secara teliti pada setiap artikel yang terpilih.

Tabel 12. Karakteristik artikel

No	***Author/ Year***	***Studyperiod***	***Country***	***Research method***	***Sampling method***	***Sample size***	***Data set***
1	*Ejigu Y, 2018*	*2016*	*Ethiopia - Afrika*	*Cross Sectional Survey*	*Two stage cluster sampling*	*2114*	*Ethiopian Demographic and Health Survey*
2	*Muyunda B, 2018*	*2014*	*Zambia - Afrika*	*Cross Sectional Survey*	*Systematic sampling*	*6139*	*The Zambia Demographics and Health Survey*
3	*Belato DT, 2017*	*2015*	*Ethiopia - Afrika*	*Cross Sectional Survey*	*Multistage stratified sampling*	*401*	*The Smallest Administrative Unit in Ethiopian Government System*
4	*Ndege S, 2016*	*2007*	*Kenya – Afrika*	*Cross Sectional Survey*	*N/A*	*7396*	*The Academic Model Providing Access to Health care Program (AMPATH) initiated HBCT*

Sumber: Rikawarastuti, Siregar, dan Hanifah (2021)

Tabel 12 menunjukkan hasil ekstraksi data karaktertistik artikel yang diperoleh di dalam studi *systematic review* ini. Tabel selengkapnya dapat dilihat dalam artikel asli (6).

Tabel 13. Faktor-faktor yang berhubungan dengan tes HIV dan cakupan ANC EMTCT Cascade

No	Author/ Year	ANC EMTCT Cascade (%)							Factors related to HIV testing
		Had ANC visit at least once	Received pre-HIV test counsel-ing	Advised get tested for HIV	Tested for HIV	Tested for HIV and received the test result	Received post HIV test counsel-ing	ARV Therapy	
1	Ejigu Y. 2018	67.3	26.6	37.9	38.2	35.1	22.1	N/A	- Education level - Marital status

5

Rikawarastuti, 2020 SMJ

									- Religion - Awareness - Rural/urban domicile - Stigma
2	Muyunda B, 2018	93.9	95	95.2	80.6	98	N/A	N/A	- Age - Social-economic status
3	Belato DT, 2017	N/A	N/A	N/A	29.43	N/A	N/A	N/A	- Partner engagement - Education level - Income - Social culture
4	Ndege S, 2016	N/A	99.4	N/A	96.6	3.3	N/A	N/A	- Number of ANC visit

Sumber: Rikawarastuti, Siregar, dan Hanifah (2021)

Tabel 13 menunjukkan hasil ekstraksi data faktor-faktor yang berhubungan dengan tes HIV dan cakupan ANC EMTCT Cascade yang diperoleh di dalam studi *systematic review* ini. Tabel selengkapnya dapat dilihat dalam artikel asli (6).

8. Langkah 8: Mensintesis studi terpilih

Buat sintesis atau rangkuman kesimpulan dari setiap parameter yaitu dari setiap kolom tabel ekstraksi data terhadap seluruh artikel yang terpilih (Tabel 12 dan Tabel 13). Berikut contoh sintesis data untuk Karakteristik Artikel (Tabel 12) (6).

a. **Kolom 1**: *The study found 12 articles on EMTCT coverage from the last 10 years publication (2009-2019).*

b. **Kolom 2**: *The latest publication was found in 2018 and the oldest in 2011. Most of them (7 articles) were conducted in the last five years.*

c. **Kolom 3**: *The study period was conducted from 2002 to 2016. The study in Africa were conducted in various countries, which are Ethiopia, Benin, Congo, Cote d'Ivoire, Gabon, Ghana, Kenya, Lesotho, Malawi, Nigeria, Rwanda, South Africa, Tanzania, Togo, Uganda and Zambia. Meanwhile, the article from Central America was conducted in El Salvador.*

d. **Kolom 4**: *Almost every study using cross-sectional survey (11 articles), except 1 article using cohort study.*

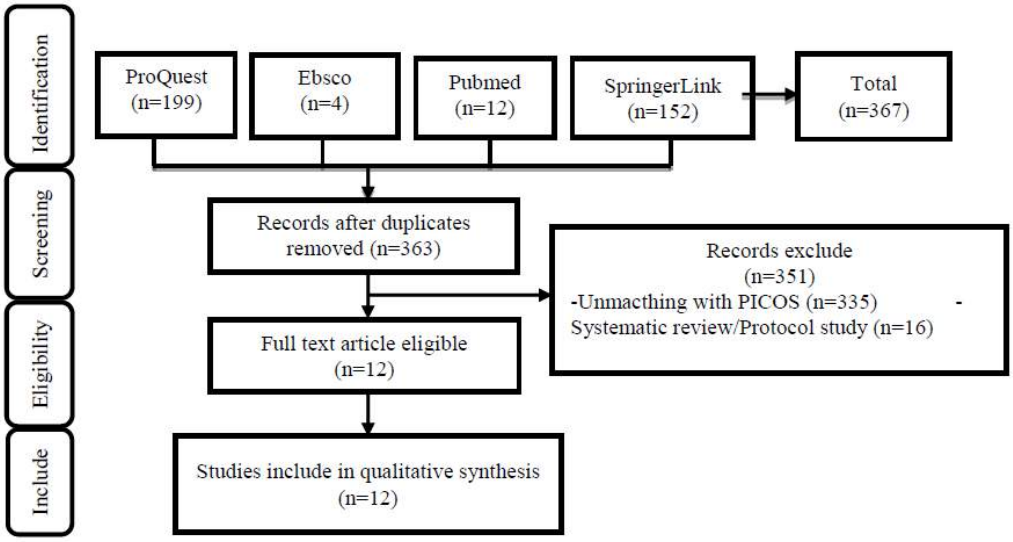
e. **Kolom 5**: *Sample size are between 401 to 283410 of pregnant women*

f. **Kolom 6**: *With variation sampling method, which are two stage cluster sampling, systematic sampling, multistage stratified sampling, consecutive sampling and random sampling.*

g. **Kolom 7**: *The articles using data set which are Demographic and Health Survey (DHS), The Smallest Administrative Government System, The Academic Model Providing Access to Health care Program, HIV/AIDS and Malaria Indicator Survey, Ministry of Health Statistical Yearbook, Hospital Administered, Baseline Household Survey, Health Demographic Surveillance Site (DHSS), Maternity in Migori and AUDS Stigma Study (MAMAS Study).*

9. Langkah 9: Melakukan penyajian dan pelaporan data

Penyajian dan pelaporan data penelitian *systematic review* sama dengan laporan penelitian pada umumnya. Penelitian *systematic review* dapat disajikan dalam laporan penelitian yang memuat bagian cover, isi, penutup, dan lampiran. Dokumentasi tahapan penelitian *systematic review* dan seluruh artikel terpilih umumnya disertakan dalam laporan *systematic review*. Lampirkan juga PRISMA yang diperoleh seperti gambar bagan berikut ini.



Gambar 2. Lampiran PRISMA (6)

Gambar 2 menunjukkan perjalanan proses pencarian dan penyaringan artikel pada studi *systematic review* ini, mulai dari identifikasi artikel dari berbagai database, penyaringan sesuai kriteria inklusi dan kriteria kelayakan, dan pada akhirnya diperoleh jumlah artikel yang sesuai dengan kriteria yang telah ditetapkan.

10. Langkah 10: Membuat manuskrip

Pertama yang sebaiknya dilakukan adalah memilih terlebih dahulu jurnal apa yang akan dituju untuk mempublikasikan artikel *systematic review* agar memiliki instructions for author dalam menulis manuskrip. Selanjutnya mengunduh template artikel pada jurnal tersebut dan masukkan hasil penelitian *systematic review* ke dalam template tersebut. Berikut contoh manuskrip *systematic review* yang dijadikan contoh penerapan 10 langkah dalam melakukan *systematic review*.

Sapporo Medical Journal
Volume 55, Issue 01, January, 2021

Factors Influencing Coverage of Elimination Mother to Child Transmission of HIV: A Systematic Literature Review

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Abstract— In Indonesia, the rate of HIV transmission from mother to child is the highest in the world due to the low coverage of HIV testing and therapy among pregnant women. This study examined published research on the prevention of mother to child HIV transmission (PMTCT) and its associated factors. A systematic review using ProQuest,Ebsco, PubMed, and SpringerLink databases for the period 2009-2019 found 12 relevant publications. Of pregnant women surveyed, 22-98% had an antenatal care (ANC) visit at least once; 7.3-99.4% received pre-HIV test counseling; 37.9-95.2% were advised to get tested for HIV; 6-97% were tested for HIV; 3.3-98% received their results; 22.1% received post-HIV test counseling; and 41-84.6% received antiretroviral (ARV). The factors influencing PMTCT were socio-demographics, distance to health care facilities, number of ANC visits, knowledge and awareness, partner engagement, stigma, and counseling. PMTCT publications were limited in terms of geographical coverage and none of the publications contained quality and sustainability aspects. There is a need to conduct research to improve the coverage of PMTCT in Indonesia as well as service quality and sustainability.

Keywords— HIV prevention, PMTCT, Systematic Review, ART, Coverage

Gambar 3. Contoh manuskrip *systematic review* (6)

E. Langkah Penyusunan Publikasi *Systematic review*

Berikut adalah contoh penulisan artikel publikasi hasil *systematic review*.

Health Policy and Planning, 2021, 1–16
doi: 10.1093/heapol/czab030
Review

The costs of scaling up HIV and syphilis testing in low- and middle-income countries: a systematic review

Rabiah al Adawiyah[1,*], Olga PM Saweri[1,2], David C Boettiger[1], Tanya L Applegate[1], Ari Probandari[3], Rebecca Guy[1], Lorna Guinness[4,5], and Virginia Wiseman[1,4]

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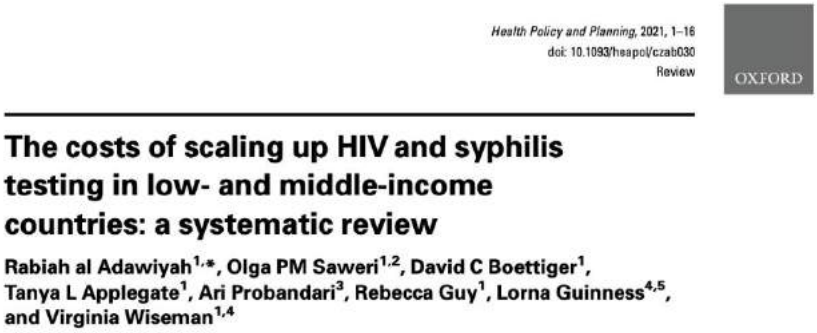
Accepted on 16 February 2021

Gambar 4. Contoh penulisan artikel publikasi hasil *systematic review* (8)

Terdapat 12 item dalam memandu penyusunan publikasi *systematic review* berdasarkan PRISMA 2020, yaitu sebagai berikut (9).

1. Identifikasi judul sebagai sebuah laporan sebagai *systematic review*


Health Policy and Planning, 2021, 1–16
doi: 10.1093/heapol/czab030
Review
OXFORD

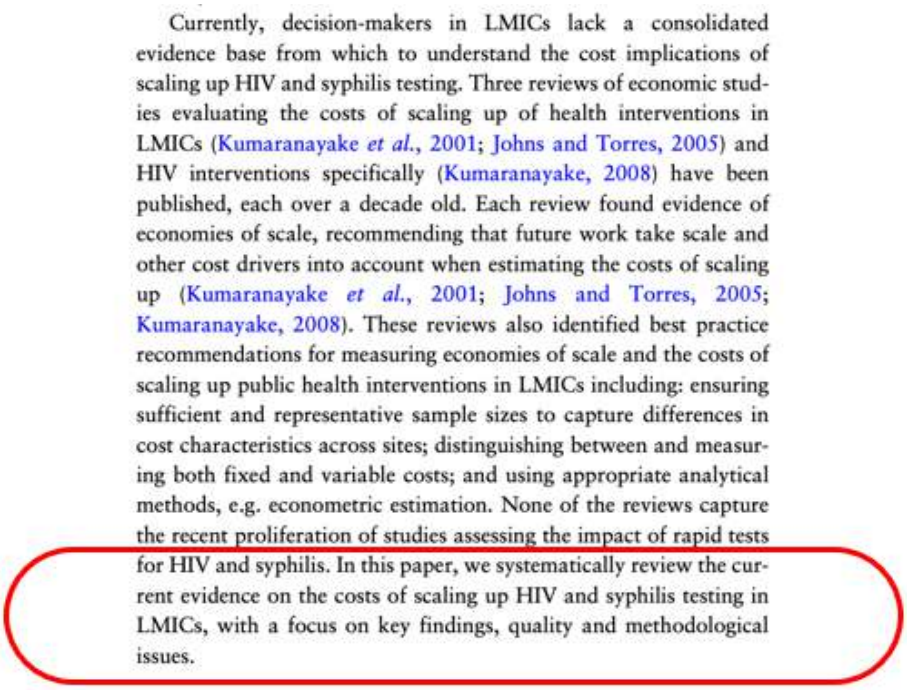
The costs of scaling up HIV and syphilis testing in low- and middle-income countries: a systematic review

Rabiah al Adawiyah[1,*], Olga PM Saweri[1,2], David C Boettiger[1], Tanya L Applegate[1], Ari Probandari[3], Rebecca Guy[1], Lorna Guinness[4,5], and Virginia Wiseman[1,4]

Gambar 5. Contoh judul sebagai sebuah laporan sebagai *systematic review*

Gambar 5 merupakan contoh bahwa judul artikel *systematic review* harus jelas menandakan bahwa artikel tersebut adalah *systematic review*.

2. Terdapat kalimat tujuan utama atau pertanyaan penelitian secara jelas dan eksplisit


Currently, decision-makers in LMICs lack a consolidated evidence base from which to understand the cost implications of scaling up HIV and syphilis testing. Three reviews of economic studies evaluating the costs of scaling up of health interventions in LMICs (Kumaranayake *et al.*, 2001; Johns and Torres, 2005) and HIV interventions specifically (Kumaranayake, 2008) have been published, each over a decade old. Each review found evidence of economies of scale, recommending that future work take scale and other cost drivers into account when estimating the costs of scaling up (Kumaranayake *et al.*, 2001; Johns and Torres, 2005; Kumaranayake, 2008). These reviews also identified best practice recommendations for measuring economies of scale and the costs of scaling up public health interventions in LMICs including: ensuring sufficient and representative sample sizes to capture differences in cost characteristics across sites; distinguishing between and measuring both fixed and variable costs; and using appropriate analytical methods, e.g. econometric estimation. None of the reviews capture the recent proliferation of studies assessing the impact of rapid tests for HIV and syphilis. In this paper, we systematically review the current evidence on the costs of scaling up HIV and syphilis testing in LMICs, with a focus on key findings, quality and methodological issues.

Gambar 6. Contoh kalimat tujuan utama atau pertanyaan penelitian secara jelas dan eksplisit

Penulisan tujuan penelitian pada artikel *systematic review* seperti pada gambar 6. Artikel ini bertujuan untuk mengkaji bukti terkini tentang biaya peningkatan skala tes HIV dan Sifilis di *Low-Income Countries and Middle-Income Countries*. Kalimat tujuan penelitian ataupun pertanyaan penelitian biasanya terletak di bagian pendahuluan pada paragraf terakhir.

3. Kriteria inklusi dan kriteria eksklusi ditetapkan secara spesifik

Eligibility criteria

Studies were eligible for this review if they: (i) measured the costs of scaling up HIV and/or syphilis testing at scale using empirical data, modelling or a hybrid of these approaches; (ii) focused on HIV and/or syphilis testing to identify new infections; (iii) were conducted in an LMICs, defined according to the World Bank Country and Lending Groups classification in 2019 (World Bank, 2019); and (iv) were full research papers (reviews, editorials, letters and conference papers were excluded). No date or language restrictions were applied.

Gambar 7. Contoh kriteria inklusi dan kriteria eksklusi yang ditetapkan secara spesifik

Gambar 7 menunjukkan contoh bahwa dalam penulisan *systematic review* harus ada kriteria inklusi dan eksklusi atau *eligibility criteria*. Kriteria ini harus sesuai dengan PICO yang sebelumnya telah ditetapkan. Penulis tersebut menetapkan kriteria tidak ada pembatasan tanggal maupun bahasa. Hal ini ditetapkan ketika studi jarang dilakukan sehingga studi yang akan direview akan lebih banyak didapatkan.

4. Pada bagian metode, sumber informasi dicantumkan secara spesifik seperti database dan register yang digunakan untuk mengidentifikasi penelitian-penelitian dan tanggal ketika pencarian terakhir

Search strategy

The review team defined the search terms according to four domains based on the aims of this review. The four domains included: infectious disease; screening and testing; economics; and LMICs. Despite the frequent use of the term 'scaling up' in international health, in practice it has been interpreted in many different ways (Mangham and Hanson, 2010). Search terms relating to 'scaling up' were not included in the initial screening, rather an extensive manual screening was conducted to filter articles according to the eligibility criteria listed below. The search terms were applied in six databases: Medline via Ovid; Econlit via Proquest; Embase via Ovid; EMCARE via EBSCO; CINAHL via EBSCO; and Global Health via Ovid. The search strategy used medical subject headings for Medline and comparable terms for the other databases (complete Medline search terms can be found in Supplementary Appendix S1). The NHS Economic Evaluation Database, a bibliographic record of published health technology assessments, was also searched using the same search strategy. A librarian from the authors institute was consulted on the search strategy including the selection of domains and search terms. The systematic review followed the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines (Moher *et al.*, 2009) and is registered on the International Prospective Register of Systematic Review (PROSPERO), identification number CRD42018103890.

Gambar 8. Contoh pada bagian metode, sumber informasi dicantumkan secara spesifik dan keterangan register di PROSPERO

Pada bagian metode, penulis harus menuliskan database apa yang digunakan dan register apa yang digunakan untuk mencari hasil-hasil penelitian yang akan direview. Gambar 8 menunjukkan bahwa studi ini menggunakan beberapa sumber informasi antara lain Medline via Ovid, Econlit via Proquest, Embase via Ovid, EMCARE via EBSCO, CINAHL via EBSCO, dan Global Health via Ovid. Detail key words yang digunakan juga harus dicantumkan. Penulis juga berkonsultasi dengan pustakawan mengenai proses searching yang dilakukan. Selain itu, sebaiknya mencantumkan tanggal pencariannya, namun pada artikel ini tidak dicantumkan. Keterangan register di PROSPERO juga dicantumkan.

5. Metode yang spesifik digunakan untuk menilai risiko bias pada bukti-bukti penelitian-penelitian yang didapatkan

Data extraction and appraisal

The variables used to describe the different studies in this review are shown in Table 1. All data were extracted by two reviewers and all differences were again resolved by a third reviewer. A narrative synthesis describing the included studies and their conclusions was considered to be the most appropriate approach to synthesizing the findings of the studies (Ryan and Cochrane Consumer and Communication Review Group, 2013). The synthesis from data extraction is presented according to the characteristic of studies included, type of cost studies undertaken, methods to assess cost and impact of scale on costs.

The reporting and methodological quality of studies estimating cost at scale were assessed using a checklist designed for this review (Table 2). The checklist was developed in consultation with global experts in the development of existing checklists for costing exercises and include a checklist for good practice in the economic evaluation of health interventions (Husereau *et al.*, 2013); checklists for appraising priority setting studies in the health sector (Peacock *et al.*, 2007; Wiseman *et al.*, 2016); Global Health Cost Consortium guiding principles (Vassall *et al.*, 2017); and best practice guidelines for calculating the costs of scaling up health interventions (Johns and Baltussen, 2004; Johns and Torres, 2005; Kumaranayake, 2008). Three reviewers independently appraised the studies against this checklist, and any disagreements were resolved by consulting two additional reviewers.

Gambar 9. Contoh metode yang spesifik digunakan untuk menilai risiko bias pada bukti-bukti penelitian-penelitian yang didapatkan

Gambar 9 menunjukkan bahwa data dari paper yang masuk diekstrasi oleh dua reviewer. Jika terdapat perbedaan, maka harus dikonsultasikan dengan orang ketiga. Terdapat *checklist* untuk menilai risiko bias.

6. Metode yang spesifik digunakan untuk menyajikan dan menyintesis hasil

Data extraction and appraisal

The variables used to describe the different studies in this review are shown in Table 1. All data were extracted by two reviewers and all differences were again resolved by a third reviewer. A narrative synthesis describing the included studies and their conclusions was considered to be the most appropriate approach to synthesizing the findings of the studies (Ryan and Cochrane Consumer and Communication Review Group, 2013). The synthesis from data extraction is presented according to the characteristic of studies included, type of cost studies undertaken, methods to assess cost and impact of scale on costs.

Gambar 10. Contoh metode yang spesifik digunakan untuk menyajikan dan menyintesis hasil

Gambar 10 menunjukkan bahwa pada paper tentang *the costs of scaling up HIV and syphilis testing* ini, sintesis naratif dari ekstrasi data disajikan sesuai dengan karakteristik studi yang masuk, jenis studi *cost* yang dilakukan, metode untuk menilai *cost* dan dampak skala terhadap *cost*.

7. Memberikan total jumlah penelitian-penelitian dan partisipan dan merangkam karakteristik-karateristik dari penelitian-penelitian tersebut

Results

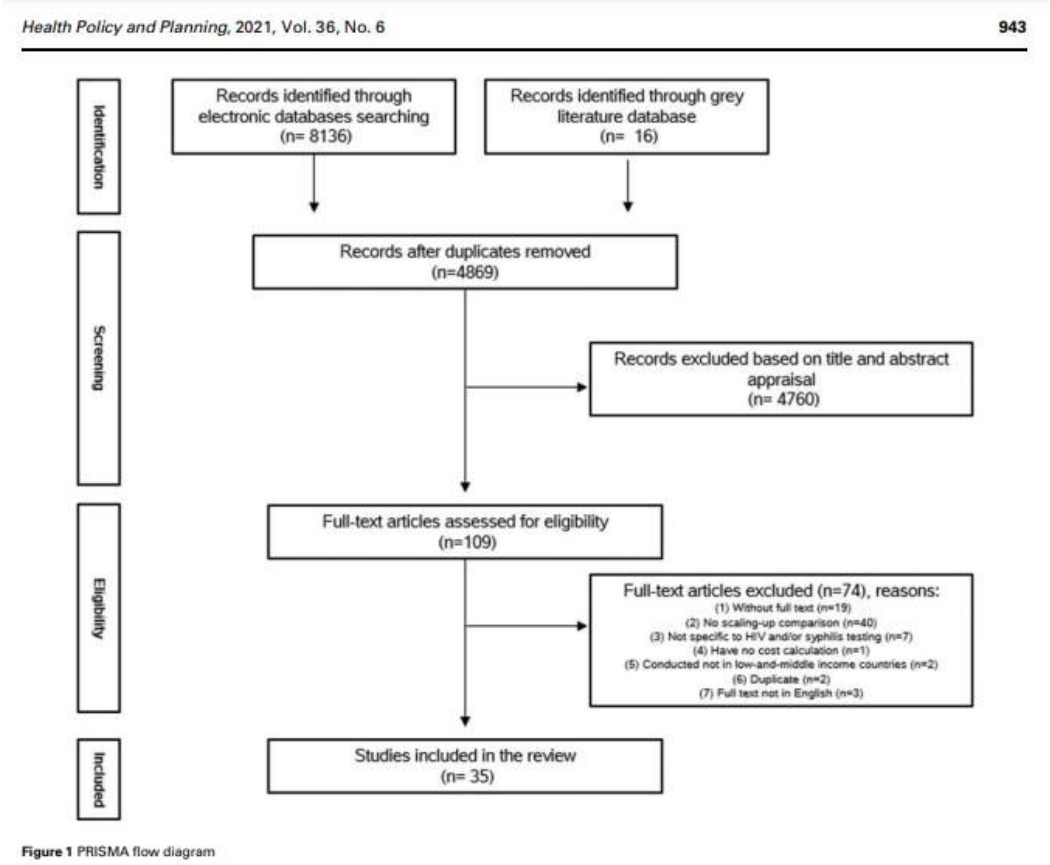
We identified 35 eligible studies from 4869 unique citations as shown in the PRISMA flow diagram (see Figure 1).

Characteristics of the studies included

Table 3 summarizes the characteristics of 35 included studies in this review. The majority of studies were conducted in Sub-Saharan Africa ($N = 17$), published after 2010 ($N = 24$) and focused on HIV testing ($N = 33$). Only two studies examined the costs of scaling up syphilis testing (Schackman *et al.*, 2007; Shelley *et al.*, 2015). Most of the HIV studies involved facility-based testing using rapid tests in the general adult population ($N = 19$) or among pregnant women ($N = 6$), while all syphilis studies were focused on pregnant women ($N = 2$). Only three studies explored the use of HIV self-testing in

Gambar 11. Contoh dalam memberikan total jumlah penelitian-penelitian dan partisipan dan merangkam karakteristik-karateristik dari penelitian-penelitian tersebut

Gambar 11 menunjukkan bahwa total studi yang telah dicari dan studi yang telah diseleksi harus dicantumkan. Proses ini disajikan dengan menggunakan *flow chart* pada Gambar 12 berikut.



Gambar 12. Diagram alir PRISMA pada contoh paper

8. Pada *systematic review*, harus jelas apa *outcome* nya. *Outcome* yang dimaksud dalam paper ini adalah pada Gambar 13 berikut.

Costs of scaling up	
Definition of scaling up	As described by authors
Year (costs)	Year of currency values presented (e.g. 2018 dollars)
Unit(s) of output	Choice of output measure (e.g. number of clients tested, number of facilities with testing available)
Sample size	Total number of, e.g facilities, individuals, tests
Timeframe for decision	Short run (fixed inputs cannot be changed) and long run (all inputs can be changed) (Kumaranayake, 2008)
Cost categories	Categorization of costs as defined by author(s)
Economies/diseconomies of scale	How costs changed with scale of output and by how much.
Empirical results	Specific findings related to the costs of scaling up (e.g. coefficients of scale)
Key drivers of costs identified	Key drivers of the costs of scaling up (e.g. geography, population sub-group, type of providers)

Gambar 13. *Outcome* pada contoh paper

Selain itu, ketika menulis hasil sebaiknya tunjukkan jumlah penelitian yang disertakan dan jumlah partisipan untuk masing-masing penelitian. Jika membandingkan kelompok, maka tunjukkan arah pengaruhnya, yakni kelompok mana yang diunggulkan. Gambar 14 berikut adalah contoh tabel hasil pada paper *systematic review*.

Table 3 Studies of the cost of scaling up HIV and syphilis testing

Study	Intervention(s)	Country	Study population	Setting	Time horizon	Study design	Type of economic analysis (and ratio if applicable)	Data source (s)	Analytical approach to measure scale
#1 (Shelley *et al.*, 2015)	Syphilis testing/RST/POC	Zambia	Pregnant women (age not specified)	ANC clinic	5 months	Cross-sectional study	Cost analysis	Primary data collection	Empirical
#2 (Schackman *et al.*, 2007)	Syphilis testing, comparing: #1 Syndromic surveillance/not POC #2 RPR for syphilis/not POC #3 RST/POC	Haiti	Pregnant women (age not specified)	ANC clinic	Not specified	Modelling	Cost-effectiveness analysis	Published literature/data	Modelling
#3 (Bautista-Arredondo *et al.*, 2018a,b)	HIV voluntary and provider-initiated counselling and testing/ HIV rapid test/not POC	Nigeria	General population (age not specified)	Health facility	6 months	Cross-sectional study	Cost analysis	Primary data collection	Econometric
#4 (Dandona *et al.*, 2008a,b)	HIV voluntary counselling and testing/HIV rapid test/not POC	India	General population (age not specified)	Health facility	1 year	Cross-sectional study	Cost analysis	Primary data collection	Empirical
#5 (Galárraga *et al.*, 2017)	HIV testing and counselling/HIV rapid test/not POC	Kenya	General population (age not specified)	Health facility	22 months	Cross-sectional study	Cost analysis	Primary data collection	Econometric
#6 (Hontelez *et al.*, 2013)	HIV testing/type of test not specified/not POC, comparing: #1 ART at CD4 count ≤350 cells/μl #2 Universal testing and treatment	South Africa	General population (aged 15–65 years)	Not specified	Lifetime	Modelling	Cost-effectiveness analysis	Published literature/data	Modelling
#7 (Ishikawa *et al.*, 2016)	HIV testing/HIV rapid test/not POC, comparing: #1 The current coverage #2 A focused approach #3 A universal approach	Namibia, Kenya, Haiti and Vietnam	Pregnant women (aged 15–49 years old)	ANC clinic	20 years	Modelling	Cost-effectiveness analysis	Published literature/data	Modelling
#8 (McConnel *et al.*, 2005)	HIV rapid voluntary counselling and testing/HIV rapid test/POC	South Africa	General population (age not specified)	VCT clinic	1 year	Cross-sectional study	Cost analysis	Primary data collection	Empirical
#9 (Ahaibwe and Kasirye, 2013)	HIV testing/HIV rapid test/not POC, comparing: #1 The current coverage #2 100% coverage of adult population	Uganda	General population (adult 15–49 years)	Stand alone, integrated w/health facility, non- health facility and mobile VCT services	Lifetime	Modelling	Cost-effectiveness analysis	Published literature/data	Modelling

Gambar 14. Tabel hasil rangkuman karakteristik studi yang ditemukan pada contoh paper

9. Berikan ringkasan singkat mengenai keterbatasan bukti yang disertakan dalam tinjauan seperti risiko penelitian yang bias, inkonsistensi, dan ketidaktepatan seperti pada Gambar 15 berikut.

Table 5 Results of the appraisal

References	Costs										Costs at scale			
	1 Question(s)	2 Perspective	3 Time horizon	4 Relevant inputs	5 Methods for quantities	6 Data source(s)	7 Sample size	8 Discount rate	9 Sensitivity analysis	10 Costs reporting	11 Costs and scale	12 Quantification	13 Fixed and variable costs	14 Factors other than scale
Shelley *et al.* (2015)	✓	✓	(✓)	✓	✓	X	(✓)	✓	✓	✓	(✓)	✓	✓	✓
Schackman *et al.* (2007)	✓	✓	X	(✓)	✓	✓	X	(✓)	✓	✓	(✓)	X	X	✓
Bautista-Arredondo *et al.* (2018a,b)	✓	✓	✓	✓	✓	✓	(✓)	(✓)	X	✓	✓	✓	✓	✓
Dandona *et al.* (2008a,b)	✓	(✓)	✓	✓	✓	✓	(✓)	✓	X	✓	(✓)	X	✓	X
Galárraga *et al.* (2017)	✓	X	✓	✓	✓	✓	(✓)	✓	X	✓	✓	✓	✓	✓
Hontelez *et al.* (2013)	✓	✓	✓	(✓)	(✓)	(✓)	(✓)	✓	✓	(✓)	(✓)	X	X	X
Ishikawa *et al.* (2016)	✓	✓	(✓)	(✓)	X	✓	X	(✓)	✓	(✓)	X	X	X	(✓)
McConnel *et al.* (2005)	✓	X	✓	✓	✓	✓	X	(✓)	X	✓	✓	X	✓	X
Ahaibwe G & Kasirye I (2013)	✓	X	✓	X	X	X	(✓)	(✓)	✓	(✓)	X	X	X	X
Alsallaq *et al.* (2017)	✓	✓	(✓)	(✓)	(✓)	✓	(✓)	(✓)	✓	✓	X	X	X	X
Cambiano *et al.* (2015)	✓	✓	(✓)	(✓)	(✓)	✓	X	(✓)	✓	(✓)	X	X	X	(✓)
Cherutich *et al.* (2018)	✓	✓	✓	✓	✓	✓	(✓)	(✓)	✓	✓	(✓)	X	(✓)	✓
Mwenge *et al.* (2017)	✓	✓	✓	✓	✓	✓	(✓)	√	✓	✓	✓	✓	✓	✓
Stuart *et al.* (2018)	✓	X	(✓)	(✓)	(✓)	(✓)	X	X	X	(✓)	(✓)	X	X	(✓)
Tromp *et al.* (2013)	✓	✓	✓	(✓)	✓	(✓)	(✓)	(✓)	√	(✓)	X	X	(✓)	✓
Zhuang *et al.* (2018)	✓	✓	✓	(✓)	(✓)	X	X	✓	X	(✓)	(✓)	X	X	X
Dandona *et al.* (2008a,b)	✓	(✓)	✓	✓	✓	✓	(✓)	✓	X	✓	✓	✓	✓	✓
Dandona *et al.* (2005)	✓	X	✓	✓	✓	✓	(✓)	✓	X	(✓)	(✓)	✓	✓	✓
Forsythe (2002)	✓	✓	✓	(✓)	✓	✓	X	(✓)	X	✓	X	✓	✓	✓
Granich *et al.* (2009)	✓	X	(✓)	(✓)	(✓)	(✓)	X	X	X	(✓)	X	X	X	X
Kasymova *et al.* (2009)	✓	✓	✓	✓	✓	✓	(✓)	✓	X	✓	(✓)	X	(✓)	X
Kato *et al.* (2013)	✓	X	✓	(✓)	X	✓	(✓)	(✓)	X	✓	(✓)	X	X	✓
Kumar *et al.* (2006)	✓	√	(✓)	(✓)	(✓)	(✓)	X	✓	✓	(✓)	(✓)	X	X	✓
Dandona *et al.* (2009)	✓	(✓)	✓	✓	✓	✓	(✓)	✓	✓	(✓)	(✓)	X	(✓)	✓
Mangenah *et al.* (2019)	✓	✓	✓	✓	✓	✓	(✓)	✓	✓	✓	✓	✓	✓	X
McCreesh *et al.* (2017)	✓	✓	✓	(✓)	X	✓	(✓)	(✓)	✓	(✓)	X	X	X	✓
Minh *et al.* (2012)	✓	✓	✓	(✓)	✓	✓	(✓)	✓	X	✓	X	X	(✓)	X
Sharma *et al.* (2016)	✓	✓	✓	✓	✓	(✓)	(✓)	✓	✓	✓	(✓)	X	(✓)	(✓)
Nelwan *et al.* (2016)	✓	✓	✓	(✓)	X	(✓)	X	X	X	(✓)	X	X	X	X
Luong Nguyen *et al.* (2018)	✓	(✓)	✓	✓	(✓)	✓	(✓)	✓	✓	✓	X	X	(✓)	X
Rely. (2003)	✓	✓	(✓)	(✓)	X	(✓)	X	(✓)	✓	(✓)	X	X	X	(✓)
Tchuenche *et al.* (2018)	✓	(✓)	✓	✓	✓	✓	(✓)	✓	(✓)	✓	X	X	X	✓
Verstraaten *et al.* (2017)	✓	✓	✓	✓	✓	(✓)	(✓)	(✓)	✓	✓	X	X	(✓)	X
Zang *et al.* (2016)	✓	✓	✓	(✓)	(✓)	✓	(✓)	✓	✓	(✓)	(✓)	X	X	(✓)
Zhang *et al.* (2015)	✓	(✓)	✓	✓	✓	✓	(✓)	(✓)	X	✓	(✓)	✓	(✓)	✓

✓: yes; X: no; (✓): partially addressed.

Gambar 15. Contoh keterbatasan bukti yang disertakan dalam tinjauan seperti risiko penelitian yang bias, inkonsistensi, dan ketidaktepatan

10. Deskripsikan interpretasi umum tentang hasil tinjauan dan implikasi penting

Discussion

To expand access to HIV and syphilis testing and reach elimination targets, successful small-scale programmes need to cover broader populations in LMICs. The availability of reliable and detailed information on the resources required to do this is a key determinant of success (Johns and Torres, 2005; Kumaranayake, 2008; World Health Organization and ExpandNet, 2009; Mangham and Hanson, 2010). This review validates that scale is an important driver in determining the costs of HIV and syphilis testing programmes in resource-constrained health systems. It also reveals the potential for economies of scale (i.e. a reduction in average costs as the number of people tested increases) at least in the short run when structural changes to health systems (e.g. training, quality management and stock management) necessary for the large scale delivery of testing have not yet been undertaken.

Despite syphilis testing being widely recommended for use in LMICs, particularly in pregnancy (Newman *et al.*, 2013; Storey *et al.*, 2019), only two studies explored the costs of scaling up syphilis testing. Recent pilot studies have demonstrated the cost-effectiveness of HIV and syphilis screening using a dual rapid test over single HIV and syphilis tests or HIV testing alone (Bristow *et al.*, 2016). It has been argued that dual tests for HIV and syphilis may potentially contribute to economies of scale and scope (associate with the sharing of fixed costs across activities) in terms of start-up, training, quality management, supervision and monitoring while also serving to promote syphilis testing, which is lagging well behind HIV testing in many LMICs (Bristow *et al.*, 2016; Taylor *et al.*, 2017). While there were many studies that found community-based strategies are effective in increasing uptake of testing (Asiimwe

Gambar 16. Contoh interpretasi umum tentang hasil tinjauan dan implikasi penting

Gambar 16 menunjukkan bahwa interpretasi umum mengenai hasil tinjauan dan implikasinya terletak pada awal atau paragraf pertama di bagian *discussion*. Implikasi adalah hal-hal yang perlu diubah dan diperbaiki atas dasar dari temuan.

11. Cantumkan sumber pendanaan utama untuk tinjauan yang dilakukan

Funding

Corresponding author has received funding from the Scientia PhD Scholarship scheme provided by the University of New South Wales.

Conflict of interest statement. None declared.

Ethical approval. No ethical approval was required for this study

Gambar 17. Contoh pencantuman sumber pendanaan utama untuk tinjauan yang dilakukan

Gambar 17 menunjukkan bahwa sumber pendanaan dalam melakukan *systematic review* harus dicantumkan dalam artikel.

12. Sertakan nama beserta nomor register

> and search terms. The systematic review followed the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines (Moher *et al.*, 2009) and is registered on the International Prospective Register of Systematic Review (PROSPERO), identification number CRD42018103890.

Gambar 18. Contoh pencantuman nama beserta nomor register

Gambar 18 menunjukkan bahwa nama dan nomor register *systematic review* juga harus dicantumkan di dalam artikel.

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Lampiran 1. PRISMA *Checklist* 2020

PRISMA 2020 Checklist

Section and Topic	Item #	Checklist item	Location where item is reported
TITLE			
Title	1	Identify the report as a systematic review.	
ABSTRACT			
Abstract	2	See the PRISMA 2020 for Abstracts checklist.	
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of existing knowledge.	
Objectives	4	Provide an explicit statement of the objective(s) or question(s) the review addresses.	
METHODS			
Eligibility criteria	5	Specify the inclusion and exclusion criteria for the review and how studies were grouped for the syntheses.	
Information sources	6	Specify all databases, registers, websites, organisations, reference lists and other sources searched or consulted to identify studies. Specify the date when each source was last searched or consulted.	
Search strategy	7	Present the full search strategies for all databases, registers and websites, including any filters and limits used.	
Selection process	8	Specify the methods used to decide whether a study met the inclusion criteria of the review, including how many reviewers screened each record and each report retrieved, whether they worked independently, and if applicable, details of automation tools used in the process.	
Data collection process	9	Specify the methods used to collect data from reports, including how many reviewers collected data from each report, whether they worked independently, any processes for obtaining or confirming data from study investigators, and if applicable, details of automation tools used in the process.	
Data items	10a	List and define all outcomes for which data were sought. Specify whether all results that were compatible with each outcome domain in each study were sought (e.g. for all measures, time points, analyses), and if not, the methods used to decide which results to collect.	
	10b	List and define all other variables for which data were sought (e.g. participant and intervention characteristics, funding sources). Describe any assumptions made about any missing or unclear information.	
Study risk of bias assessment	11	Specify the methods used to assess risk of bias in the included studies, including details of the tool(s) used, how many reviewers assessed each study and whether they worked independently, and if applicable, details of automation tools used in the process.	
Effect measures	12	Specify for each outcome the effect measure(s) (e.g. risk ratio, mean difference) used in the synthesis or presentation of results.	
Synthesis methods	13a	Describe the processes used to decide which studies were eligible for each synthesis (e.g. tabulating the study intervention characteristics and comparing against the planned groups for each synthesis (item #5)).	
	13b	Describe any methods required to prepare the data for presentation or synthesis, such as handling of missing summary statistics, or data conversions.	
	13c	Describe any methods used to tabulate or visually display results of individual studies and syntheses.	
	13d	Describe any methods used to synthesize results and provide a rationale for the choice(s). If meta-analysis was performed, describe the model(s), method(s) to identify the presence and extent of statistical heterogeneity, and software package(s) used.	
	13e	Describe any methods used to explore possible causes of heterogeneity among study results (e.g. subgroup analysis, meta-regression).	
	13f	Describe any sensitivity analyses conducted to assess robustness of the synthesized results.	
Reporting bias assessment	14	Describe any methods used to assess risk of bias due to missing results in a synthesis (arising from reporting biases).	
Certainty assessment	15	Describe any methods used to assess certainty (or confidence) in the body of evidence for an outcome.	

PRISMA 2020 Checklist

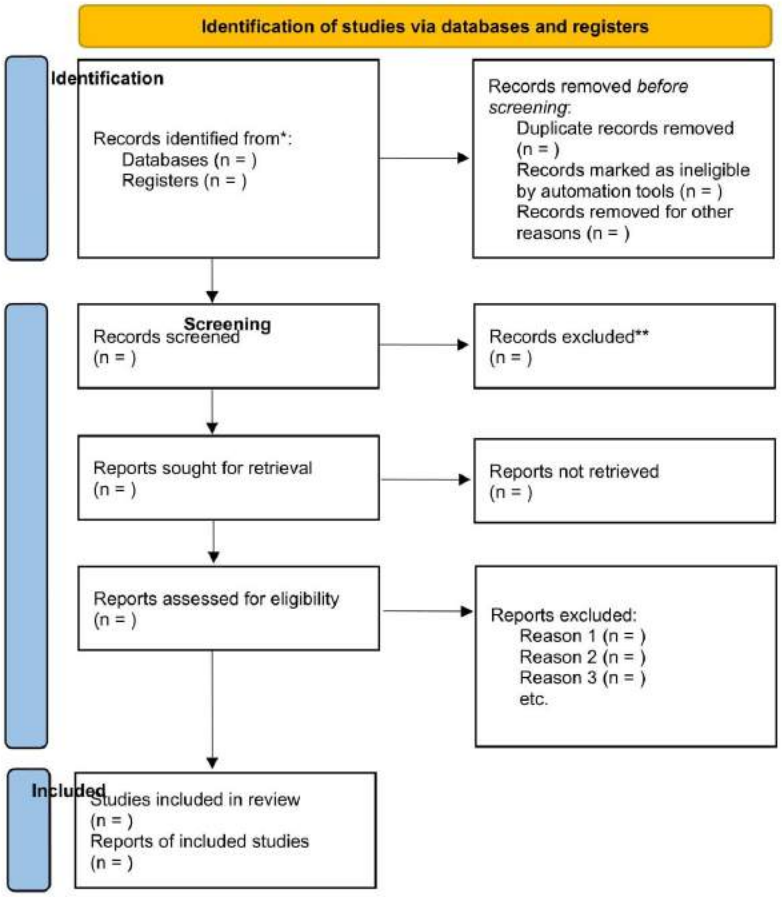
Section and Topic	Item #	Checklist item	Location where item is reported
RESULTS			
Study selection	16a	Describe the results of the search and selection process, from the number of records identified in the search to the number of studies included in the review, ideally using a flow diagram.	
	16b	Cite studies that might appear to meet the inclusion criteria, but which were excluded, and explain why they were excluded.	
Study characteristics	17	Cite each included study and present its characteristics.	
Risk of bias in studies	18	Present assessments of risk of bias for each included study.	
Results of individual studies	19	For all outcomes, present, for each study: (a) summary statistics for each group (where appropriate) and (b) an effect estimate and its precision (e.g. confidence/credible interval), ideally using structured tables or plots.	
Results of syntheses	20a	For each synthesis, briefly summarise the characteristics and risk of bias among contributing studies.	
	20b	Present results of all statistical syntheses conducted. If meta-analysis was done, present for each the summary estimate and its precision (e.g. confidence/credible interval) and measures of statistical heterogeneity. If comparing groups, describe the direction of the effect.	
	20c	Present results of all investigations of possible causes of heterogeneity among study results.	
	20d	Present results of all sensitivity analyses conducted to assess the robustness of the synthesized results.	
Reporting biases	21	Present assessments of risk of bias due to missing results (arising from reporting biases) for each synthesis assessed.	
Certainty of evidence	22	Present assessments of certainty (or confidence) in the body of evidence for each outcome assessed.	
DISCUSSION			
Discussion	23a	Provide a general interpretation of the results in the context of other evidence.	
	23b	Discuss any limitations of the evidence included in the review.	
	23c	Discuss any limitations of the review processes used.	
	23d	Discuss implications of the results for practice, policy, and future research.	
OTHER INFORMATION			
Registration and protocol	24a	Provide registration information for the review, including register name and registration number, or state that the review was not registered.	
	24b	Indicate where the review protocol can be accessed, or state that a protocol was not prepared.	
	24c	Describe and explain any amendments to information provided at registration or in the protocol.	
Support	25	Describe sources of financial or non-financial support for the review, and the role of the funders or sponsors in the review.	
Competing interests	26	Declare any competing interests of review authors.	
Availability of data, code and other materials	27	Report which of the following are publicly available and where they can be found: template data collection forms; data extracted from included studies; data used for all analyses; analytic code; any other materials used in the review.	

From: Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. BMJ 2021;372:n71. doi: 10.1136/bmj.n71

For more information, visit: http://www.prisma-statement.org/

Lampiran 2. PRISMA 2020 *flow diagram*

PRISMA 2020 flow diagram for new systematic reviews which included searches of databases and registers only



*Consider, if feasible to do so, reporting the number of records identified from each database or register searched (rather than the total number across all databases/registers).

**If automation tools were used, indicate how many records were excluded by a human and how many were excluded by automation tools.

From: Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. BMJ 2021;372:n71. doi: 10.1136/bmj.n71

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