

Note: This is Online Appendix 1 of Lokotola CL, Mash R, Sethlare V, Shabani J, Temitope I, Baldwin-Ragaven L. Migration and primary healthcare in sub-Saharan Africa: A scoping review. *Afr J Prm Health Care Fam Med.* 2024;16(1), a4507.

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TABLE 1-A1: Summary of included studies

	First author	Year of publication	Study location	Migrants' country of origin	Aim of the study	Study design	Method
1	Amsalu Ribka et al. ³⁹	2020	Sub Saharan Africa	Cameroon, Somalia, Niger, Tchad,	To assess the lesson learned in the implementation of the helping babies survive (HBS) training in the context of conflicts and displacements	A retrospective review	The study is a review of the implementation training programs on helping babies survive
2	Autino B et al. ²⁹	2012	Burkina Faso - Nanoro District	Cote d'Ivoire, Ghana and France	To describe the characteristics of HIV/Aids migrant patients and identify barriers to anti-retroviral treatment	A retrospective review and survey	The study was a review of patient clinical registries and individual interview
3	Amodu Olowakemi C et al. ³⁹	2020	Nigeria - Abuja	Borno States	To examine the existing structural challenges in health administration and services and understand reproductive health access limitations for internal displaced women (IDP)	Critical ethnography	The study used a survey with interviews and thematic analysis of stakeholders and 29 IDP women
4	Chabeda-Barthe et al. ³²	2019	Kenya	Kenya	To look at how the developmental disability of a child can be a factor that may motivate parents to migrate to a country with presumed better education and healthcare facilities.	mixed method ethnographic study.	Data was collected using four methods; survey, interviews, focus group discussions and participant observation.

5	Bocquier et al. ⁸¹	2019	Ouagadougou, Burkina Faso	Burkina Faso	To measure differences in health between current and former adult residents, hereafter called non-migrants and outmigrants.	A longitudinal study, mixed method study	The qualitative study used a combination of focus groups and in-depth interviews. The second, quantitative, survey
6	Owot F. ⁴³	2012	Kitgum, Uganda	Uganda	To identify reproductive health problems faced by the youth in the IDP camps, to examine the manner in which reproductive health services are utilised, to assess the attitudes of the youth towards reproductive health services	Cross sectional study design	Quantitative study; oral interviews based on a structured questionnaire.
7	Afeadie Kwaku R. ²⁵	2018	Ghana	Ghana	To investigate the health seeking behaviour of rural- urban migrant slum dwellers in Madina before and after migration	A mixed method research by an explanatory sequential design problem	A survey with self-administered questionnaire. Key informant interview with migrants and officials from the health district hospital.
8	Teye A. ⁴⁹	2019	Ghana	Ghana, Ivory coast, Nigeria, China, Chad, Togo	to examine the access and use of health care in Ghana in relation to migration status.	mixed method	A survey of 116 migrants and 116 non-migrants residing in the Greater Accra Region of Ghana. Ten in-depth interviews and one unstructured expert interview
9	Shamsu-Deen Z. ⁵⁷	2015	Ghana	Ghana	to examine the relationship between migration and health of migrant female porters	mixed method survey	216 questionnaires were administered, 9 focus group discussions were conducted and 4 interviews.

10	Dourgnon et al. ³⁰	2014	Tunisia	Libya, Chad, Ethiopia, Sudan, Nigeria, ivory coast	To better understand refugees' patterns of migrations and health concerns	Case study comprising a monographic and qualitative approach	A three-fold survey and interviews with the refugees, the professionals from the NGOs and public facilities that were operating in the camp
11	Bawa et al. ⁴⁶	2018	Nigeria	Chad, Niger Republic	To describe the engagement process for a transboundary nomadic population and the interventions provided to improve population immunity among them while traversing through Nigeria.	an intervention study which involved a cross-sectional mixed method	key informant interviews and semi structured questionnaire were used.
12	Sami et al. ⁶¹	2018	South Sudan	South Sudan	to describe the factors that influence implementation of a package of facility- and community-based neonatal interventions in four displaced person camps in South Sudan using a health systems framework	A mixed method case study	A focus group discussion, in-depth interviews among program managers, and observations of health facility readiness. Secondary data were used.
13	Lusambili et al. ⁵⁶	2020	Kenya	Somalia	to improve understanding of the impact of COVID-19 on women refugees' access to and utilisation of antenatal care, delivery and postnatal care in Eastleigh, Kenya.	qualitative study	25 in-depth interviews with facility and community health care staff were conducted.

14	Aluel RV. ⁶²	2011	South Africa	South Sudan	to explore the challenges and experiences of South Sudanese male refugees in South Africa.	Exploratory qualitative research	In-depth, face-to-face interviewing was used.
15	Maphosa F. ⁵³	2012	Zimbabwe	Zimbabwean migrants going elsewhere, mainly SA	the circumstances and behaviours of irregular migrants that may contribute to the spread of HIV&AIDS among migrants and their communities back home.	Qualitative exploratory and descriptive. Described as a variety of ethnographic methods.	Interviews, discussions, observations, informal interview with 122 respondents.
16	Vearey J et al. ⁴⁰	2018	South Africa	Various - internal, Zimbabwe	To explore the implications of HIV/AIDS programming for diverse migrant groups labouring in informal workplaces in Johannesburg, South Africa	Literature review and limited primary qualitative data in 3 case studies	Observations, unstructured informal and 8 semi-structured interviews
17	Tanle A. ³¹	2012	Ghana (migrants returning from Libya)	Ghana.	To explore health implications associated with irregular migration	Convergent mixed methods	A questionnaire and in-depth interviews were used.

18	Musariri L et al. ⁶⁹	2016	South Africa	Swaziland, Mozambique and Zimbabwe	To explore factors associated with condom use among migrant men and women in selected commercial farms in two provinces of South Africa	Secondary analysis of database	This is a survey study.
19	Bereket Y, Kumie A. ²⁰	2013	Ethiopia	Djibouti, Somalia, Yemen, Saudi Arabia.	To assess hazards and associated factors among returned migrants living at Bati Woreda, Amhara National Regional State.	Mixed convergent methods	A survey with a questionnaire and semi-structured interviews were used.
20	Kunnuji M et al. ⁵⁴	2013	Nigeria	Internal migration from Iwaya community	To understand the effect of migration status on reproductive health knowledge and sexual activities of young people in general and out-of-school adolescent girls in particular	Survey	A questionnaire was used
21	Shamsu-Deen Z. ⁶⁰	2019	Ghana	Internal migration - Maprusi, Dagombas, Tamplinsi	To assess the health behaviour of migrant female head porters in Accra	Survey	A questionnaire was used
22	Mathee A, Naicker N. ⁶⁵	2016	South Africa	Zimbabwe, Malawi, Nigeria, Zambia, Ethiopia, Mali, Kenya, Somalia, Lesotho, Mozambique, Uganda, DRC,	To compare living conditions and environmental health status in IMs relative to South African (SA) households, both living in settings of poverty in Johannesburg, SA.	Secondary analysis of database	Sequential surveys 2006 to 2010 of 500 households in Joburg were used.

				Ivory Coast, Rwanda, Rep of Congo.			
23	Mukondwa K, Gonah L. ⁴²	2016	South Africa	Southern Africa countries Congo, Nigeria, Somalia, Ethiopia (and Thailand and Bangladesh)	To assess the inherent nature of irregular migration poses exposure and vulnerabilities making access to sexual and reproductive health services (SRH) imperative.	Narrative review with structured approach	A review of databases was done (Medline, PubMed, Lancet, Google Scholar, Findia, Embase and grey/UN agencies/policy documents, 1994-2015 in SA).
24	Olowu D. ²⁸	2014	South Africa	Lesotho	To discuss how migration, health status, gender-based discrimination and access to education have had an impact on HIV/AIDS vulnerability among rural women from migrant communities in Lesotho.	Secondary analysis of database, but presented more as a narrative review	Data from Lesotho MOH and Social Welfare, Bureau of Stats, and HIV prevalence survey with 150 ever-married women from 2 rural communities
25	Babatunde SS. ²⁷	2017	Nigeria	Internal migration.	To assess the current level of contraceptive utilization among the migrants To assess the relationship between contraceptive use and fertility behaviour To investigate determinants of contraceptive use among the migrants	Survey	A questionnaire was used

26	Lakika DM, Drimie S. ⁷⁵	2019	South Africa	Democratic Republic of and Republic of Congo	To explores the cultural context and relationship between food, health, and illness. To promote a better understanding of their health beliefs and healing strategies.	Exploratory descriptive qualitative	semi structured interviews and focus group interview were used.
27	Mhlongo MD. ³³	2018	South Africa	Burundi, DRC, Ghana, Mozambique, Rwanda, Uganda, Malawi and Zimbabwe,	to investigate the association between exposure to traumatic life events and post-traumatic stress disorder risk in refugees and migrants in Durban, South Africa	Survey	Interviews and questionnaire were conducted
28	Hwati. ⁵⁹	2013	South Africa	Zimbabwe, Malawi, Tanzania, Lesotho, Mozambique,	To explore the ways in which cross border migrants use to access and to stay on treatment, given the wide range of challenges that they face during their stay in Johannesburg.	Exploratory descriptive qualitative	Semi-structured interviews along with non-participant observations were used.
29	Tunçalp O. ⁶³	2015	Mali	Internal Displaced Malians	To understand the association between levels of conflict, displacement and availability of SRH services within the health sector in post-conflict Mali.	quantitative/survey	A questionnaire was used

30	Morrison TB. ⁴⁸	2012	USA	Somalia	to investigate preventive service provision to Somali patients compared with non-Somali patients and to identify factors associated with completion of these services	quantitative analysis of patient records	Secondary data analysis
31	Chiumento et al. ⁷⁴	2020	Rwanda and Uganda	Democratic Republic of Congo	To evaluate a community-based group psychosocial intervention with Congolese refugees living in these settings.	qualitative (interviews)	Interview was used
32	Janse Van Rensberg GH et al. ¹²	2021	South Africa	Africa and overseas	To describe the characteristics and differences between the immigrants and SA children admitted at Kalong provincial Hospital	A cross-sectional study	Structured interview and health records review
33	Adoch W et al. ⁵¹	2020	Uganda	South Sudan	To assess knowledge of cervical cancer risk factors and symptoms among a large population of refugee women in Palabek refugee settlement, northern Uganda	Cross-sectional study	Structured interview

34	Kendall J. et al. ⁵⁸	2018	Malawi	South Africa	To assess migration and health status (in regard to measures of mental health, physical health, and HIV status) for older age in Malawi To identify migration selection for older individuals (man and women) in Malawi	A longitudinal panel data analysis from Malawi Longitudinal Study of Families and Health	Bivariate analysis of the relationships between the health measures (from 2008) and migration (measured in 2010). Multivariate logistic regression analysis, using a lagged dependent variable approach. Define factors predicting future migration for men and women.
36	Isidro Carrion MA et al. ²²	2014	North Kivu, DRC	North Kivu, DRC	To better understand the impact of the recent violence and population movements in Wali kale and surrounding areas on the humanitarian and healthcare needs in the population, MSF conducted a retrospective household mortality	Quantitative survey	A retrospective household interviews were based on a structured questionnaire. Mantel-Haenszel Chi Square was calculated with its respective p-value.
37	Zulu EM et al. ²⁶	2011	Nairobi, Kenya	Nairobi, Kenya	to address the linkages between urbanization, poverty, and health dynamics using a longitudinal framework	Qualitative study (Urban, Poverty, and Health Dynamics longitudinal framework)	Health records review

38	Vearey et al. ⁶⁷	2011	South Africa	South Africa and other countries	to investigate the migration profiles of primary healthcare (PHC) users and the ways in which this mediates experiences of PHC services.	Exploratory survey Interview with key informant participants was used	high prevalence of a migratory status amongst PHC user and emphasise the importance of gaining improved understanding of local (intra-provincial), internal (inter-provincial) as well as external (cross-border) mobility.
39	Isuzi Akivaga Fedha J. ⁵⁵	2013	Nairobi, Kenya	Somalia	To establish the influence of cultural traditions on the reproductive health of Somali women refugees in the urban centre of Nairobi, Kenya	Cross-sectional	Quantitative: Self-administered and/or researcher-administered questionnaires N=89 (underpowered)
41	Abuga Orayo J. ⁴⁷	2014	Kenya	Sudan, Somalia, Ethiopia, Tanzania, and Uganda	To understand factors behind consumption of health insurance among migrant communities in Kenya."	Cross sectional study	Secondary data analysis and demographic Household Survey
41	Bukuluki P. et al. ⁶⁸	2021	Uganda	South Sudan	To examine adolescents' sexual behaviour in Bidi bidi settlement (the largest refugee camp) in Uganda in order to develop a sexual and reproductive health plan	Mixed method	survey/questionnaire and qualitative (in-depth interviews and semi-structured interviews with key informants)

42	Palmer JJ, Robert O, Kansime F. ¹¹	2017	Uganda	South Sudan	To evaluate the success, limitations, and challenges of a Ugandan government initiative to eliminate sleeping sickness through the integration of sleeping sickness rapid diagnostic tests into primary healthcare facilities on a large scale. To assess whether integration of refugee responses into general health services was equitable and effective, and to identify operational/implementation problems and governance gaps.	mixed methods	Quantitative, including counting of RDTs used per refugee population head counts; Qualitative, including focus groups and in-depth interviews with key informants and ethnographic observations.
43	Charlotte Scheerens, et al ⁴¹	2021	Uganda	Nigeria Democratic Republic of Congo, Uganda, Kenya, Zimbabwe, South Africa, Sudan, Rwanda, Zambia, Botswana, Malawi, Somaliland	To explore the knowledge, awareness, and insights of PHC providers (in this case Family Physicians) as to what is needed for public health interventions and climate-resilient and migrant-inclusive health systems	Cross sectional	Exploratory qualitative with three focus group discussions, using a semi-structured topic guide to facilitate the groups

44	Edith T. Kibiribiri, et al. ⁷²	2016	Durban, South Africa	Democratic Republic of Congo, Zimbabwe, Burundi, Malawi, Rwanda, Mozambique, Somalia, Uganda, Ghana, Kenya, Tanzania, Cameroon and Liberia	To examine disparities in the quality of prenatal care received by pregnant refugee women and local South African pregnant women attending the same primary healthcare facilities	Mixed method Cross-sectional	Mixed methods: cross-sectional questionnaire-based survey tool and maternity chart audit of respondents) and Qualitative (in-depth interviews)
45	Berhanie Getnet B et al. ²¹	2017	Ethiopia	Eritrea	To test the significance of mediating and moderating roles of sense of coherence, adaptive coping styles and social support in the relationship between exposure to trauma and psychological symptoms in a refugee camp population	Cross-sectional	Quantitative using a number of established psychometric screening and assessment tools
46	Idemudia ES, et al. ⁷¹	2013	South Africa	Zimbabwe	To examine and identify pre-migration stressors and reasons influencing immigration to South Africa. To examine and identify mid- and post-migration stressors that may impact the transition into a foreign country. To inform and provide recommendations for health care providers about the physical and mental health needs of Zimbabwean refugees	Cross-sectional	Two focus groups and a short demographic survey were used

47	Githaiga. ⁵²	2010	South Africa	Southern African Democratic Community	This research report aims to use international, regional and national laws and literature reviews to reflect on refugees and asylum-seekers rights to access healthcare in South Africa.	Secondary data analysis	This is a research report which focuses on migrants' right to healthcare services as one of the components of the right to health.
48	Chichava M. ⁷³	2011	Maputo	South Africa	To explore how Mozambican middle-class women perceive official local healthcare services in both their public and private dimensions, within their country, and why they sometimes travel abroad to South Africa in search of healthcare	Focus group discussion	The study was an anthropological field-site/fieldwork conducted in Maputo across homes, coffee shops, clinics, hospitals, and offices
49	Odumisa EK, Ayedemi O. ⁶⁴	2017	Nigeria	Nigeria (Internal Displacement)	To examine the predictors of contraceptive use among migrant and non-migrant couples in Nigeria	Secondary data analysis	Logistic regression was used

50	Kane JC et al. ³⁴	2014	Burundi, Rwanda, Tanzania, Chad, Djibouti, Ethiopia, Kenya, Uganda, Namibia, Zambia, Liberia	Not specified	To estimate contact coverage of MNS services in refugee camps by presenting rates of visits to camp primary care centres for treatment of MNS problems	A secondary analysis of all MNS data collected through the HIS from January 2009 to March 2013 from 90 refugee camps.	<p>Data were collected within each refugee camp at the clinic level in outpatient departments and entered on tally sheets. Seven MNS categories were developed in a consultative process with key experts.</p> <p>The proportion of MNS problems attributable to each of the seven categories was presented.</p> <p>An estimate of contact coverage of MNS services was calculated for each camp by calculating rates of MNS visits per thousand persons per month for each of the seven categories as well as for an overall MNS visit rate.</p>
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