Supplementary appendix

S1: Description of all included studies.

Authors' names Year of publication Title	Place where study was performed	Definition of migrant	Research question	Place of origin of migrants	Administra tive status of migrants	Definition of adherence to care process: *Treatment adherence *Retention in care *Virological response	Study design	Study aim / Primary outcome (when clearly mentioned)	Study perio d	Inclusion criteria	Number of particip
Abgrall 2013 Visiting One's Native Country : The Risks of Non adherence in HIV-Infected Sub-Saharan Migrants (1)	Europe France	Not specified	Study of the factors of adherence to the care process among migrants	Africa	Not specified	Treatment adherence Adherence to treatment = self- administered questionnaires (10 questions about adherence to ART) 3 categories (highly adherent (100%), moderately adherent (between 99% and 80%) non-adherent (<80%)	Descriptive epidemiologica l studies (cross- sectional, longitudinal)	To describe the course of ART adherence before and during travel	2006-2009	Aged at least 18 years; HIV viral load <200 cp/mL; unchanged combination ART regimen for at least 3 months prior to enrollment; ART: minimum 3 antiretroviral drugs with at least 1NNRTI or PI ; Planned visit to a sub- Saharan country for a period of between 2 weeks and 6 months, in the following 8 weeks	268
Abgrall 2014 Risk factors for adherence failure in HIV-infected sub-Saharan migrants living in France and travelling back to their native country (2)	Europe	Not specified	Study of the factors of adherence to the care process among migrants	Africa	Not specified	Treatment adherence Adherence failure= switching from adherence (high or moderate, i.e., 80- 100%, of prescribed tablets taken) to non-adherence (<80%).	Descriptive epidemiologica l studies (cross- sectional, longitudinal)	To explore adherence related to geographical mobility	2006- 2009	Migrants from sub- Saharan Africa; Living in France; pVL <200cp/ml 8 weeks before a planned two- week to six-month trip to a sub-Saharan country	200
Arnold 2020 Documenting best practices for maintaining access to HIV prevention, care and treatment in an era of shifting	United States	Not specified	Study of the factors of adherence to the care process among migrants.	Not specified	Not specified	Loss to follow up; Treatment adherence	Qualitative study	To explore how access to prevention, care and treatment is maintained for immigrants impacted by HIV and living in California in a dynamic environment, where state and federal level policies may be in direct	May 2018 - Januar y 2019	Providers, case workers, advocates, Documented experts, and peer navigators in HIV prevention and care Clinics	20

immigration								opposition to one another,			
policy and											
discourse (3) Arora 2024 Patient-reported outcomes and experiences of migrants enrolled in a multidisciplinary HIV clinic with rapid, free, and onsite treatment: the 'ASAP' study (4)	Europe Canada	By region of birth	Study of the factors of adherence to the care process among migrants.	Africa Caribbean Other	Not specified	Treatment adherence with perceived compliance with clinician's treatment plans measured using the Generic Medical Interview Satisfaction Scale (G-MISS).	Cohort study	To explore patient-reported outcomes and experiences among migrants living with HIV	Januar y 2020- Januar y 2021	New treatment-naive people living with HIV (PLWH) Migrants Participants were initiated on bictegravir/embtricitabi ne/tenofovir alafenamide.	35
Arrey 2017 Perceptions of stigma and discrimination in health care settings towards sub-Saharan African migrant women living with HIV/AIDS in Belgium: a qualitative study (5)	Europe Belgium	Not specified	Study of the factors of adherence to the care process among migrants	Africa	Not specified	Retention in care; Health-seeking behavior	Qualitative study	To explore the causes, forms and consequences of HIV- related stigma and discrimination	April 2013- Dece mber 2014	SSA migrant women; over 18 years old; diagnosed HIV positive more than 3 months previously; English or French speaking; receiving care in Belgium	44
Been 2016 Risk Factors for Non-Adherence to cART in Immigrants with HIV living in the Netherlands: Results from the Rotterdam Adherence project (6)	Europe Netherland	First generation immigrants: participants born outside of Western Europe. Second generation immigrants: participants for whom one or both parents were born outside of Western Europe	Study of the factors of adherence to the care process among migrants	Africa South America Central America Not specified; Other	Not specified	Treatment adherence	Descriptive epidemiologica l studies (cross- sectional, longitudinal)	To assess socio- demographic and psychological risk factors for non-adherence to cART in immigrant PLWH enrolled in clinical care.	Nove mber 2012 July 2013	First- and second- generation immigrants with HIV; aged 18 or older	352
Been 2017 Self-reported adherence and	Europe Netherlands	First- and second- generation	Study of the factors of adherence to	Africa South America	Not specified	Treatment adherence; Virological response	Cohort study	To assess two methods- pharmacy refill adherence and self-reported adherence	Nove mber 2012-	Included in the Rotterdam Adherence Project ; had to be	299

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pharmacy refill adherence are both predictive of an undetectable viral load among HIV-infected migrants receiving cART		adult immigrants	the care process among migrants.	Central America Caribbean Other				- in order to determine their comparative predictive value for undetectable viral load	July 2013	sufficiently fluent in at least one the following languages: Dutch, English, French, Spanish or Portuguese	
(7) Been 2019 Anxiety, depression and treatment adherence among HIV-infected migrants (8)	Europe Netherlands	Not specified	Study of the factors of adherence to the care process among migrants	Africa; South America/ Central America; Caribbean	Not specified	Treatment adherence	Cross-sectional study	To evaluate whether the HADS can be used in standard care of MLWH to measure psychological distress	Nove mber 2012- July 2013	First- or second- generation immigrant; aged 18 years or older; diagnosed with HIV; had to be sufficiently fluent in one of the following languages: Dutch, English, French, Spanish or Portuguese	306
Been 2020 Feasibility of four interventions to improve treatment adherence in migrants living with HIV in the Netherlands (9)	Europe Netherlands	People originating from a region outside of Western Europe (first or second generation).	Study of the factors of adherence to the care process among migrants	Africa; South America/ Central America Caribbean Other	Not specified	Treatment adherence Virological response	Cohort study	To evaluate the feasibility of four interventions to improve HIV treatment and their efficacy if feasible: DAART (DAART, Directly administered antiretroviral therapy), GMA (Group medical appointments), screening and treatment of psychological distress and peer support	Nove mber 2012 July 2013	People originating from a region outside of Western Europe (first or second generation); aged 18 years or older ; diagnosed with HIV ; sufficiently fluent in Dutch, English, French, Spanish, or Portuguese	234
Borchmann 2022 Length of stay in Denmark before HIV diagnosis and linkage to care: a population-based study of migrants living with HIV, Denmark, 1995 to 2020 (10)	Europe Denmark	Immigrants in Denmark who obtained residence status	Study of the factors of adherence to the care process among migrants	Africa Southeast Asia Other	Documente d	Retention in care	Cohort study on mandatory reporting data	To determine the time from immigration to diagnosis of HIV infection and from HIV diagnosis to LTC, and to examine late presentation, stratified by migrant geographical region of origin and calendar period, in Denmark over a 25-year period	1 Januar y 1995 and 31 Dece mbre 2020	All individuals with HIV 1 in DHCS who immigrated to Denmark and obtained residence status, aged 16 years or older at time of first contact with an HIV healthcare center between 1 January 1995 and 31 December 2020.	2166
Castelan 2023 Intentional but not Unintentional Medication Non- adherence was related with beliefs about medicines among	Europe Netherlands	Country of origin	Migrant status as a risk or protective factor for adherence to the care process	Africa Caribbean Europe Other	Not specified	Adherence evaluated using the 5-item Medication Adherence Report Scale	Cross-sectional study	To investigate the prevalence of unintentional and intentional non- adherence to ART	From April to July 2021	Participants aged 18 years or older who were prescribed ART at the time of enrollment in the study.	80

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a multi-ethnic sample of people with HIV(11)											
COHERE Immunological and virological response to antiretroviral treatment in migrant and native men and women in Western Europe; is benefit equal for all? (12)	Europe	Geographical origin different from reporting country and grouped from the following categories: Western Europe and Western Countries (WEWC), Eastern Europe (EE), North Africa and Middle East (NAME), sub-Saharan Africa (SSA), Latin America (LA), Caribbean (CRB) and Asia/Oceanai s (Asia/Oce).	Migrant status as a risk or protective factor for adherence to the care process	Africa Southeast Asia South America Central America Caribbean	Not specified	Virological response	Cohort study	Aim: Evaluate differences in immunological and virological response to cART in HIV positive men and women to geographical origin in COHERE from 2004 to 2013. Primary outcome: Time to virological response from cART initiation according to geographical origin in men and women	1 Januar y 1997 1 Januar y 2004	Antiretroviral-naive patients; 18-74 years old; cART initiation; CD4 T-cell count and HIV RNA measurements in 6 months prior to c ART initiation; at least two CD4 T-cell count and HIV RNA measurements while on cART	32817
Cyrus 2017 Disparity in Retention in Care and Viral Suppression for Black Caribbean- Born Immigrants Living with HIV in Florida (13)	United States Florida	Non-Hispanic whites, US- born Blacks, Hispanics and foreign- Blacks from non-Spanish speaking Caribbean countries	Migrant status as a risk or protective factor for adherence to the care process; Study of the factors of adherence to the care process among migrants, And	Caribbean	Not specified	Lost to follow-up; Virological response Retention in care : engagement in care two or more times at least three months apart during 2015	Cohort study	To assess the disparity of non-retention in HIV care and non-viral suppression for non-Hispanic Black Caribbean-born immigrants	2000 2014	Case definition for HIV (CDC definition) ; Aged 13 years or older ; Non- Hispanic whites, US- born Blacks, Hispanics and foreign-Blacks from non-Spanish speaking Caribbean countries	56 119

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			Among migrants, study of the factors of adherence to the care process								
Dang 2012 Sociocultural and Structural Barriers to Care Among Undocumented Latino Immigrants with HIV Infection (14)	United States Houston, Texas	Hispanic/Lati n ethnicity as determined by country of origin, entry into the US after 1994	Study of the factors of adherence to the care process among migrants	South America/ Central America	Undocumen ted	Loss to follow up; Retention in care	Qualitative study	To examine the circumstantial, situational and social factors that uniquely affect entry and retention in care for undocumented Latinos	June 2006 Augus t 2006	HIV infected; age18 years or older; Hispanic/Latino ethnicity as determined by country of origin, entry into the US after 1994 ; undocumented status ; residence in one of the 6 Houston EMA countries	22
Demeke 2018 HIV Infection- Related Care Outcomes among US-born and Non-US born Blacks with Diagnosed HIV in 40 US Areas: The national HIV Surveillance system, 2016 (15)	United States	Non-US-born	Migrant status as a risk or protective factor for adherence to the care process	Africa; Asia South America Central America Caribbean	Not specified	Retention in HIV infection-related medical care: Documentation of >=2 CD4 or VL test performed >= 3 months apart during 2015	Cross-sectional study	To examine the distribution of HIV care outcomes among US-born and non- US-born blacks, specifically, late diagnosis, linkage to HIV infection-related medical care after HIV diagnosis, retention in care, and viral suppression	2015- 2017	Data from the Medical Monitoring Project Data	1054
Demeke 2021 Antiretroviral prescription, retention in care and viral suppression according to place of birth among adults with diagnosed HIV in the United States 2015-2017, medical monitoring project (16)	United States		Migrant status as a risk or protective factor for adherence to the care process	Africa Southeast Asia South America/ Central America Caribbean	Not specified	Retention in care Treatment adherence Virological response Retention in care: documentation of two outpatient HIV visits at least 90 days apart in the previous 12 months Adherence: never missed a dose in the previous 30 days Virological response: Sustained viral suppression: all viral loads in the	Descriptive epidemiologica l studies (cross- sectional, longitudinal)	To describe HIV outcomes among US-born and non- US-born persons, and examined sociodemographic and behavioral factors in both populations that may influence these outcomes	June 2015 May 2017	HIV; aged 18 years and older	7617

						previous 12 months undetectable or <200 copies/ml					
De Monteynard 2015 Late cART initiation in Migrant Men from Sub-Saharan Africa without advanced HIV disease in France (17)	Europe France	Anyone born and having lived outside France and now residing in France, irrespective of their nationality and their length of stay in France	Migrant status as a risk or protective factor for adherence to the care process	Africa Other	Not specified	Virological response	Cohort	To compare the time to cART initiation and the types of cART regimens prescribed for migrants and non-migrants without access to care at an advanced stage of HIV disease in French Hospital	1 Januar y 2002 31 Dece mber 2010	Documented HIV 1 or HIV 2 infection; follow up in an FHDH participating center; written informed consent ; aged at least 16 years ; with CD4 cell counts above 200/micromol/ML ; no previous or current AIDS event at enrolment or within the first three months after enrollment.	13338
										Exclusion criteria: c ART regimen initiated because of pregnancy; participated in a double- blind clinical trial of antiretroviral therapy during follow up; single or dual NRTI before first-line c ART ; lost to follow or died within the first six months after FHDH enrolment ; no immunovirological assessment during the first three months and fewer than two assessments during follow-up	
De Monteynard 2016 Influence of geographic origin, sex, and HIV transmission group on the outcome of first- line combined antiretroviral therapy in France (18)	Europe France	Based on the United Nations' definition: "Anyone born and having lived outside France and now residing in France, irrespective of their nationality	Migrant status as a risk or protective factor for adherence to the care process	Africa; Caribbean	Not specified	Lost to follow-up; Virological response Lost to follow-up was defined as an interval of more than 18 months between the last follow-up visit and the last database update	Cohort study	To compare virological, immunological, and clinical outcomes after first-line cART initiation between HIV-1 infected migrants originating from SSA or non-French West indies and French natives (NFW), according to sex and HIV transmission group	1 Januar y 2006 31 Dece mber 2011	All ART naive HIV-1 infected individuals aged at least 16 years; originated from France, SSA or NFW ; enrolled in the FHDH (French Hospital Database on HIV) ; started cART between 01 January 2006 and 31 December 2011 ; at treatment initiation, at least 1 year prior to the last database	9746

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HIV/AIDS profile and realities at a regional antiretroviral therapy clinic in Jerusalem: 12 years analysis (20)status as a risk or protective factor for adherence to the care processd; Undocumen tedLost to follow-up: if patient had had ≤2 total clinical visits following HIV diagnosis).follow up, treatment outcome, and development of patients seen at an AIDS clinic over a 12-year periodJanuar y years analysis (20)initiated ART during the 12 years of analysis (20)Fournier 2019 Incidence of risk factors for medical care interruption in people living with HIV in recent years (21)Europe FranceCountry of BirthMigrant status as a risk or protective 	Direct monthly highly active antiretroviral therapy supply: a method to increase patient's adherence and			factors of adherence to the care process among	Africa		adherence Virological response	Cohort study	project supplying ART directly to patients in a clinic, once a month; the authors expected that the implementation of a "modified DOT" program would increase patients' adherence to treatment and would lead to virological and immunological	Specif	age) -diagnosis of HIV by ELISA and confirmed by western blot analysis -prescribed ART for at least 2 years prior to	385
Incidence of risk factors for medical care interruption in people living with HIV in recent years (21)Birthstatus as a risk or protective factor for adherence to the care processOtherspecifiedMedical care interruption = not seeking care in or outside the clinic for at least 18 months irrespective of whether they returned to care after the interruption.incidence rate of medical care interruption (MCI)y 2010 Detective attended the clinic at least twice between January to 2010 and Octobe r 2014Gagliardini 2024EuropeBeing bornMigrantAfrica,NotTemporary LTFUCohort studyTo estimate the risk of1.03.2People with HIV, at8864	HIV/AIDS profile and realities at a regional antiretroviral therapy clinic in Jerusalem: 12 years analysis	Israel	Not specified	status as a risk or protective factor for adherence to the care	Africa	d; Undocumen	Lost to follow-up: if patient had had ≤ 2 total clinical visits (no clinical visits following HIV	Cohort study	follow up, treatment outcome, and development of resistance in the 3 groups of patients seen at an AIDS	y 1995 1 Januar y	initiated ART during the 12 years of analysis Exclusion criterion: patients attending fewer	134
Gagliardini 2024 Europe Being born Migrant Africa, Not Temporary LTFU Cohort study To estimate the risk of 1.03.2 People with HIV, at 8864	Incidence of risk factors for medical care interruption in people living with HIV in recent	1	2	status as a risk or protective factor for adherence to the care	· ·		Medical care interruption = not seeking care in or outside the clinic for at least 18 months irrespective of whether they returned to care after	Cohort study	incidence rate of medical care interruption (MCI) Outcome:	y 2010 Octob er	attended the clinic at least twice between January to 2010 and	4796
	Gagliardini 2024 Impact of	Europe Italy	Being born outside of	Migrant status as a	Africa, Southeast	Not specified		Cohort study	To estimate the risk of temporary loss to follow-up	1.03.2 018	People with HIV, at least 18 years old	8864

COVID-19 pandemic on retention in care of native and migrant people with HIV in the ICONA cohort (22)		Italy, based on their geographical origin (derived from nationality or from country of birth or origin)	risk or protective factor for adherence to the care process	Asia, South America, Central America		absence in the ICONA database of the record of information about HIV-1 RNA, CD4 cell count determination, laboratory exams, ART modification, clinical visit or clinical event for at least one year.		in natives versus migrant people with HIV as a result of the impact of the COVID- 19 pandemic on social factors and health care	- 11 May 2023	enrolled in ICONA Foundation Study, with active follow-up in the study-defined periods.	
Gatey 2019 Does region of origin influence the timing and outcome of first- line antiretroviral therapy in France ? (23)	Europe France	Region of origin	Migrant status as a risk or protective factor for adherence to the care process	Africa; Other	Not specified	Virological response Viral suppression at 12 months	Cohort study	To assess whether cART initiation and drug choice in naive patients reflected the most recent national recommendations, and more specifically whether cART differed in African migrants versus European natives in 13 hospitals in the north and east of Paris area participating in the Nadis ® cohort Outcome Virological success= achievement of VL \leq 50 copies/ml 12 months after cART initiation	1 Januar y 2014 31 march 2015	Antiretroviral therapy- naive HIV 1 infected adults aged ≥18 years, from 15 hospital wards in the north and east of Paris area participating in the Nadis cohort in 2014, with at least two follow-up visits between 1 January 2014 and 31 March 2015. Exclusion criterion: patients who participated in a clinical trial on antiretroviral therapy	451
Gebreegziabher 2020 The role of Neighborhood Poverty in the Association between Foreign- Born status and HIV Care Continuum Outcomes in Alameda County, California (24)	United States	Foreign born status	Migrant status as a risk or protective factor for adherence to the care process	Africa; Southeast Asia; South America/ Central America	Not specified	Retention in care; Virological response Retention in care =having had two or more visits that were 90 or more days apart in the year after a person was diagnosed Virological response: having fewer than 75 copies/ml of HIV virus in the blood in the last test in the	Cohort study	To describe relationship between foreign-born status and late diagnosis, linkage to care within 30 days diagnosis, retention in HIV care a year after diagnosis and achievement of undetectable viral load a year after diagnosis And to (2) examine whether the association between foreign-born status and these outcomes was modified by the percent living in poverty in the census tract	2011-2016	PLHIV; diagnosed between 2011 and 2016;in Alameda County; had a non- missing place of birth and census tract; no missing value for the respective outcomes	1235

Guionnet 2014 Immigrant women living with HIV in Spain: a qualitative approach to encourage	Spain	Immigrant	Study of the factors of adherence to the care process among migrants	Africa; South America/ Central America	Not specified	year after diagnosis. Lost to follow-up; Retention in care; Treatment adherence	Qualitative study	Outcome: retention in care and undetectable viral load To describe the barriers and facilitators of social, cultural and psychological origin that affect the medical management and follow-up treatment of HIV positive immigrant women in Spain	Januar y 2012 July 2012	First generation sub- Saharan and Latin American Immigrants	26
medical follow- up (25) Helleberg 2013 HIV Care in the Swedish-Danish HIV cohort 1995- 2010, Closing the Gaps (26)	Europe Sweden and Denmark	According to the Danish Civil Registration System	Migrant status as a risk or protective factor for adherence to the care process	Not specified	Not specified	Lost to follow-up; Retention in care; Virological response Retention in care = visiting an HIV care center and/or VL or CD4 count measurement in the 13 months before 1 July 2010. Virological response: Successfully managed: patient had initiated HAART and VL \leq 500 copies/ml or initiated HAART at 6 months or patients were not eligible for HAART according to the national guidelines Inadequate monitoring of VL for \geq 13 months -patient had not initiated HAART and no CD4 count measured for \geq 13 months.	Cohort study	To evaluate the treatment status of HIV infected individuals enrolled in care as well as changes in the proportions who were successfully managed in Sweden and Denmark in the period 1995-2010. To assess the proportion of HIV-infected individuals who received services along the continuum of care in Denmark in 2010.	1 Januar y 2015 1 Septe mber 2010	≥18 years of age; diagnosed and treated in Denmark or in one of the three largest HIV centers in Sweden	0

Herrmann 2012 The impact of visa status and Medicare eligibility on people diagnosed with HIV in Western Australia (27).	Australia	Born outside Australia	Study of the factors of adherence to the care process among migrants	Africa; Southeast Asia	Undocumen ted	Treatment adherence	Qualitative study	To understand the impact of HIV diagnosis on visa holders and the broader implications that temporary resident status has for them and their families. To describe the experiences and outcomes of antiretroviral in those without Medicare access	April 2010 Augus t 2011	Ineligible for Medicare	22
Ivanova 2016 Preliminary Findings on the Association Between Symptoms of Depression and Adherence to Antiretroviral Therapy in Individuals Born Inside Versus Outside of Canada (28)	Canada	Not specified	Migrant status as a risk or protective factor for adherence to the care process Study of the factors of adherence to the care process among migrants	Africa; Southeast Asia; South America/ Central America; Caribbean; Other	Not specified	Treatment adherence Treatment adherence was measured using the Center for Adherence Support Evaluation (CASE) Adherence Index	Cross-sectional study	Hypothesized that country of birth (Canada vs. not Canada) would moderate the relationship between higher depression and lower adherence to ART and that this relationship would be stronger for those born outside of Canada	Not specifi ed	Infected with HIV; taking ART for at least 6 months ; at least 18 years of age ; being fluent in English	57
Jaries 2017 Population movements and the HIV cascade in recently diagnosed patients at the French Guiana- Suriname Border (29)	Europe French Guiana	Country of birth	Migrant status as a risk or protective factor for adherence to the care process	Suriname Brazil Guyana Haiti Dominican Republic	Documente d; Undocumen ted	Lost to follow-up Lost to follow-up: if patients had not consulted for >6 months 4 stages for HIV cascade: "HIV diagnosed", "Linked to HIV care", "on ART", "Suppressed viral load"	Cohort study	To describe the characteristics of newly diagnosed HIV-patients in western Guiana, to construct the HIV care cascade and to compare it with the Surinamese one	1st Januar y 2011 31 Dece mber 2012	All patients aged over 15 years; newly diagnosed with HIV infection in western French Guiana	121
Kankou 2019 Factors Associated with Virological Rebound in HIV- Positive Sub- Saharan Migrants Living in France After Traveling Back to Their Native Country:	Europe France	Native sub- Saharan persons living in France	Among migrants, study of the factors of adherence to the care process	Africa	Not specified	Virological response Virological rebound during travel in the origin country	Cohort study	To assess factors associated with virological rebound in individuals included in the ANRS-VIHVO study	2006-2009	Patients from the ANRS-VIHVO study; with pVL below 50 copies/ml	237

ANRS-VIHVO 2006-2009 Study (30)											
Krankowska 2024 Comparison between patients who interrupted ART and those with late HIV diagnosis (31)	Europe Poland	A migrant was defined according to the United Nations definition as anyone who has moved across an international border from his/her usual place of residency, irrespective of his/her's administrativ e status, cause for movement and the length of stay	Migrant status as a risk or protective factor for adherence to the care process	Not specified	Not specified	Treatment adherence; Antiretroviral discontinuation was defined as at least 30 consecutive days without taking antiretroviral treatment.	Retrospective cohort study.	To compare those who discontinued ART and reappeared in medical care with those with new late HIV diagnosis. To see if any risk factors for ART interruption could be improved through retention in care and individualization of treatment of patients with HIV	Januar y 2020 and Dece mber 2021	Included patients with HIV, under the care of one of the University Clinics of Infectious Diseases in Poland.	215
Keiser 2012 Outcomes of Antiretroviral Therapy in the Swiss HIV Cohort Study: Latent Class Analysis (32).	Europe Swiss	Not specified	Migrant status as a risk or protective factor for adherence to the care process	Africa; Southeast Asia; South America/ Central America	Not specified	Lost to follow-up; Treatment adherence; Virological response Virological response Virological definition: suppression of HIV- 1 viral load to <50 copies/ml at 6 months after starting ART among patients who were followed for at least 6 months Lost to follow-up : if the last visit was more than 14 months before the closing date of the database and the patient was not known to have died	Cohort study	To examine (1) meaningful, distinct socio-demographic and behavioral groups can be identified in the Swiss HIV Cohort Study (SHCS) trough latent class analysis (LCA) (2) if these groups differ from the main HIV transmission groups and include groups that are not directly observable using a single variable approach (3); group membership is associated with relevant treatment variables and with treatment outcomes	Januar y 2000 August 2008	Enrolled in the Swiss HIV Cohort Study; treatment naive; initiated ART at or after enrollment	4483

					-	questions at every visit	<i></i>		_		
Kinoshita 2018 Migrant patients living with HIV/AIDS in Japan: Review of factors associated with high dropout rate in a leading medical institution in Japan (33).	Other Japan	Non- Japanese: nationality of birth, irrespective of country of origin. Migrants naturalized in Japan grouped in original nationality by birth.	Migrant status as a risk or protective factor for adherence to the care process; Among migrants, study of the factors of adherence to the care process Study of the factors of adherence to the care process Study of the factors of adherence to the care process among migrants	Africa; Southeast Asia; South America/ Central America; Caribbean	Documente d; Undocumen ted	Lost to follow-up; Retention in care -Retention in care: Number of days from the initial date of visit to the last date of the visit or December 31st, 2015, whichever came first -Loss to follow-up: those who did not attend an appointment without prior notice for more than one year	Cohort study	To review the factors associated with retention of patients of foreign origin in HIV/AIDS care, and to evaluate the effectiveness of current approaches for migrant patients at the authors' outpatient clinic (OPC)	Januar y 2011 Decem ber 2014	Patients who did not require the routinely- applied clinical care during the initial visit	551
Lefebvre 2014 Antiretroviral treatment outcomes among foreign-born and Aboriginal peoples living with HIV/AIDS in northern Alberta (34).	Canada	Not specified	Migrant status as a risk or protective factor for adherence to the care process	Not specified	Not specified	Virological response Viral suppression: one viral load test <400 copies/mL ≤ 6 months after starting ART	Cohort study	To report the probability of achieving virological success in foreign-born (FB), Canadian-born aboriginal (CBA), Canadian-born non- aboriginal (CBNA) patients prescribed once-daily ART from 2006-2012. Among those patients who achieved virological suppression, to compare the rates of subsequent virological failure	1 Januar y 2006 1 July 2012	Started ART between 1 January 2006 and 1 January 2012; previously ART naive; receiving once-daily ART; \geq 18 years of age when starting ART Exclusion criteria: missing country of birth data; missing baseline viral load data; baseline viral load <400 copies/ml; had < 6 months follow up time ; started ART \leq 26 weeks before delivering a baby	322
Levison 2017 Foreign-born status as a predictor of	United States Massachuse tts	Foreign-born	Migrant status as a risk or protective	Not specified	Not specified	Lost to follow-up; Retention in care; Virological response	Cohort study	To characterize linkage, retention, and virological suppression in foreign-born compared with US-born	2002	Age <18 years; Electronic medical record reviews no evidence of new	619

engagement in HIV care in a large US metropolitan health system (35).			factor for adherence to the care process			Linkage to care if patient had a visit in each 6-month interval of the 24- month period following the index HIV test with the visit in each 6- month interval separated by \geq 60 days. Virological suppression		HIV individuals		infection; HIV labs > 90 days before index HIV test	
Levison 2017 "Where It Falls Apart": Barriers to Retention in HIV Care in Latino Immigrants and Migrants (36).	United States	Eligible participants needed to be born in Puerto Rico or other Latin American Spanish- speaking countries	Study of the factors of adherence to the care process among migrants	Puerto Rico Dominican Republic Honduras Guatemala Mexico Colombia El Salvador	Not specified	Retention in Care	Qualitative study	To understand psychosocial, cultural, and logistical processes involved in sustained attendance in HIV primary care in these populations	Decem ber 2013- April 2015	-HIV infected status -age ≥18 years -self-identified Latino -providers	51
Logie 2017 Engagement in and continuity of HIV care among African and Caribbean Black women living with HIV in Ontario, Canada (37)	Canada	Not specified	study of the factors of adherence to the care process among migrants	Africa; Caribbean	Not specified	Retention in care	Cross- sectional, longitudinal)	 (1) To adapt a comprehensive measure of engagement and continuity of care for PLWH (2) To examine the associations between engagement in HIV care and quality of life (QOL) among African, Caribbean and Black (ACB), women living with HIV, WLWH in Ontario, Canada 	June 2010 Januar y 2011	Being ≥18 years old; self-identifying as a woman; HIV positive; identifying from the ACB race/ethnicity; living in Ontario	173
MambetDoue 2016 The Role of Mediators in the Indirect Effects of Religiosity on Therapeutic Compliance in African Migrant HIV-Positive Patients (38)	Europe France	Native of sub-Saharan Africa	Study of the factors of adherence to the care process among migrants	Africa	Not specified	Retention in care	Cross-sectional study	To investigate the role of two mediators (magical- religious beliefs and non-use of toxic substances) in the interaction between religiosity (religious/spiritual beliefs and religious practice) and therapeutic compliance	Not specifi ed	Native of sub-Saharan Africa; HIV-positive; monitored regularly in the study hospital	81
Masindi 2018	Canada	Identified	Migrant	Africa;	Undocumen	Retention in care	Cohort study	To compare rates of health	April	Adults in Ontario; aged	242

Co-morbid Non- communicable Diseases and Associated Health Service Use in African and Caribbean Immigrants with HIV(39)		according to the Ontario portion of the federally maintained Immigration, Refugees and Citizenship Canada Database	status as a risk or protective factor for adherence to the care process study of the factors of adherence to the care process among migrants,	Caribbean	ted			service use for non- communicable disease (NCDs) and overall health service use among African and Caribbean immigrants with HIV with those of HIV-negative individuals from these regions and non- immigrants with HIV. Outcome: rates of ambulatory care visits; hospital admissions; emergency department visits	1, 2010 - March 31, 2013	18 years and over; alive and eligible for health insurance; African and Caribbean immigrants or HIV infected people	381
Milz 2016 Control beliefs and health locus of control in Ugandan, German and migrated sub- Saharan African HIV infected individuals (40)	Europe Germany	Not specified	Study of the factors of adherence to the care process among migrants	Africa	Not specified	Treatment adherence	Cohort study	To explore the differences in health locus of control and control beliefs between HIV infected patients from sub- Saharan Africa with and without lifetime experience of migration	Not specifi ed	-HIV-infected patients from the internal medicine and neurological HIV clinic at the University Hospital of Munster and from Rubaga Hospital Kampala Exclusion criteria: cognitive impairment; African subjects with no English language skills	62
Monge 2013 Inequalities in HIV disease management and progression in migrants from Latin America and sub-Saharan Africa living in Spain (41)	Europe Spain	Not specified; for each individual, self-referred region of origin was recorded	Migrant status as a risk or protective factor for adherence to the care process	Africa; South America/ Central America	Not specified	Treatment adherence; Virological response Patients who had not had any follow-up visit in the 1 year prior to administrative censoring were considered to be lost to follow-up	Cohort study	To investigate inequalities in the management and progression of HIV disease in Latin American and the Spanish-speaking Caribbean (LAC) and Sub-Saharan migrants (SSA) living in Spain compared with the native population	2004-2010	HIV-infected patients who were ART naive at entry; originating from Spain, Latin America and Spanish- speaking Caribbean (LAC) or sub-Saharan Africa (SSA); at least one CD4 count of any value; VL measurement> 50 cp/ml in the 6 months prior to ART initiation; at least two post-ART determinations, one within the first year Exclusion criterion:	6 811

										patients without CD4	
Myers 2016 Antiretroviral Therapy and Viral Suppression Among Foreign- Born HIV- Infected Persons Receiving Medical Care in the United States: A Complex Sample, Cross- Sectional Survey	United States	Foreign born: if patient listed as coming from a country of territory of birth other than the United States or Puerto Rico	Migrant status as a risk or protective factor for adherence to the care process	Africa; Southeast Asia; South America/ Central America; Caribbean; Other	Not specified	Virological response Viral suppression defined as undetectable or <200 copies/mL for the most recent measure	Cohort study	To describe characteristics of foreign-born HIV- infected persons receiving medical care and to explore clinical outcomes of ART receipt an viral suppression achieved by foreign-born HIV-infected persons as compared with their US- born counterparts	June 2009 May 2012	count Data from Medical Monitoring Project from 2009-2012	13 190
(42). Ojikutu 2018 African born women living with HIV in the United States: unmet needs and opportunities for intervention (43)	United States Boston and New York City	African Born	Study of the factors of adherence to the care process among migrants	Africa	Not specified	Retention in care; Treatment adherence	Qualitative study	To explore the psychosocial and mental health challenges of African born women living with HIV two cities in the US	Not specifi ed	African Immigrant; second generation African Immigrant and /or with extensive experience working with African born individuals living with HIV -aged 18 years and above -French or English speaking	45
Parisey 2019 HIV Infection in North African Patients (44)	Europe France	Patients considered from North Africa if they were born in Algeria, Morocco or Tunisia or if they had lived in one of these three countries for more than six months	Migrant status as a risk or protective factor for adherence to the care process	Africa	Not specified	Lost s to follow-up; Virological response Loss to care: absence of consultation in study structure for more than 12 months. Viral load not controlled in the previous 12 months	Cohort study	To describe the demographic, clinical and immunological characteristics of North African HIV-infected patients	1st Januar y 2015 31 Januar y 2016	->18 years old; been diagnosed with HIV-1 infection; at least one outpatient visits between 1January 2015 and 31 January 2016	835
Pérez-Molina 2012 Response to combined antiretroviral therapy according	Europe Spain	Not specified	Migrant status as a risk or protective factor for adherence to	Africa; South America/ Central America; Caribbean;	Not specified	Lost s to follow-up; Retention in care; Virological response Treatment failure: an increase in HIV-1	Cohort study	To investigate differences in treatment response according to sex and geographic origin in an HIV-infected cohort comprising Spanish-born	Januar y 2005 Decem ber 2006	HIV-infected patients from GES 5808 cohort; treatment started between January 2055 and December 2006; at least one follow-up	1090

to gender and			the care	Other		RNA levels above		and immigrant patients		visit	
origin in a cohort			process			the limit of		initiating antiretroviral			
of naive HIV-						quantitation (LOQ)		therapy.			
infected patients:						in two consecutive					
GESIDA-5808						determinations		Outcome:			
study (45)						during follow-up		Time to treatment failure			
						after an initial					
						response; not					
						reaching an HIV 1					
						RAN level < 50					
						copies/ml; no decrease in HIV 1					
						RNA level of 2					
						log10, at weeks 12-					
						16, if no other visit					
						was available; loss					
						to follow up; new					
						HIV-related					
						opportunistic					
						infection not due to					
						immune					
						reconstitution;					
						death; switch or					
						discontinuation of					
						therapy					
Poon 2013	United	Not specified	Migrant	Not	Documente	Virological	Retrospective	To conduct a retrospective	1/1/20	Patients presenting for	1620
Treatment	States		status as a	specified	d and	response;	cohort study	cohort study to compare the	03	care at Thomas Street	
outcomes in	Texas		risk or		Undocumen	Retention in care;		health outcomes of	06/30/	Health Center	
undocumented			protective		ted			undocumented Hispanics	2008	Exclusion criteria:	
Hispanic			factor for					and documented persons		Receipt of	
immigrants with HIV infection			adherence to					obtaining care in a large		antiretroviral therapy before entry to TSHC;	
			the care					county HIC clinic in Texas		Asian race; non-	
(46)			process							Hispanic Black or	
										White race; No CD4 or	
										HIV viral load	
										complete; aged under	
										18 years 6) HIV viral	
										load <400 copies/ml	
Raho-Moussa	Europe	Born outside	Migrant	Africa;	Not	Virological response	Cross-sectional	To assess association	01/05/	HIV infected adults;18	475
2019	France	of France	status as a	Other	specified	Virological non-	study	between migration,	2013	years; treated with	
Immunological			risk or		-	suppression: plasma	-	socioeconomic status and	31/10/	ART for at least six	
and virological		1	protective			viral load (VL)>50		virological suppression in	2014	months; attended	
response to			factor for			copies/ml		PLHIV on ART in two		outpatient clinic for	
antiretroviral		1	adherence to					hospitals located in Paris		one-day annual	
treatment in			the care					area		medical evaluation in	
migrant and		1	process							two French university	
native men and										clinical center l	
women in											
											16

Western Europe: Iso benefit (upp) for all (2015) Immigrant Singer Facilitations is regignement in populations in engagement in southy of the Encores of adverses of adverses of the southy of the Encores of adverses odverses adverses of adverses odverses adverses odverses adverse	Western France		1	1	1							
Barriers and Indicitators of underence ungeneration in spheritors in the New York City (48) States with child with child and with child and child addresses and individual barriers to addresses and individual barriers to addresses pecafit addresses pecafit peration in carge and individual barriers to engagement in (Vi carge pecafit peration in (Vi carge peration in (Vi carge peration in (Vi carge peration in (Vi carge peration in (Vi moly carge and individual barriers to ender vi moly carge peration in (Vi moly carge and individual barriers to and vi moly carge peration in (Vi moly carge Retention in the begemining tabit bit bit b	is benefit equal											
Effect Legal Italy born in Italy factors of origin vas between origin vas between inderveed for origin vas between inderveed for between monges shorter origin vas between origin vas between inderveed for origin vas between inderveed for between inderveed for between inderveed for between inderveed for origin vas between inderveed for origin vas between inderveed inderveen in heir contribued in Milan, Italy (49) born in Italy (region of origin vas between inderveed inderveen inderveed inderveen ind	Barriers and facilitators to engagement of vulnerable populations in HIV primary care in New York City (48)	States		migrants, study of the factors of adherence to the care process	Other	specified	Treatment adherence HIV care engagement	study	and individual barriers to and facilitators of engagement in HIV care among HIV-positive African immigrants, previously incarcerated adults, young men who have sex with men (YSMSM) and transgender women (TGW)	specifi ed	post-HIV diagnosis; 18 years of age; linked to care	
	Effect of Legal Status on the Early Treatment Outcomes of Migrants Beginning Combined Antiretroviral Therapy at an Outpatient Clinic in Milan, Italy		born in Italy (region of origin was derived from their country	factors of adherence to the care process among	South America/ Central America; Caribbean;	d; Undocumen	to follow-up; Retention in care; Virological response Retention in follow- up was based on the availability of clinical and laboratory data at the selected time point +/-90 days. The patients for whom such data were not available and were not known to have died or moved elsewhere were considered as not retained in care. Lost s to follow-up: patients for whom such data were not available and were not known to have died or moved elsewhere. Virological suppression was defined as an undetectable HIV		demographic and clinico- epidemiological characteristics of a population of undocumented migrants with HIV infection starting antiretroviral treatment at an Italian outpatient clinic and compare their early treatment outcomes with those of documented migrants and Italian natives. Outcome: Retention in care and virological suppression status at 12 months after	Januar y 2001 30 June	infected; who started c ART at our clinic between January 1, 2001 and June 30,	885

						copies/mL after 12 months +/- 90 days)					
Ross 2017 Outcomes Along the HIV Care Continuum Among Undocumented Immigrants in Clinical Care (50)	United States New York	Undocumente d patients= *patient had a missing Social Security Number (SSN) or invalid SSN in the electronic medical record (EMR) * insurance check returned a no insurance status result, Uninsured (i.e., self- pay), Emergency Medicaid or AIDS Drug Assistance Program (ADAP)	Study of the factors of adherence to the care process among migrants	Africa; South America/ Central America; Caribbean; others	Documente d; Undocumen ted	Inonthis 47-90 days) Lost to follow-up; Retention in care; Virological response Retained in care: ≥2 HIV-related lab tests (CD4 count or viral load)≥90 days apart during each calendar year Viral suppression : HIV RNA measurement >200 copies/ml for the last measured viral load during each calendar year	Cross sectional study	To compare rates of retention in care, receipt of ART and viral suppression between undocumented immigrants and documented individuals in a large, diverse clinical population of HIV-infected patients in a setting with high HIV prevalence and a substantial number of undocumented immigrants	1 Januar y 2006 31 Decem ber 2014	All HIV infected persons at least 18 years old; who had at least one outpatient visit at MMC between January 1, 2006 and December 31, 2014	7551
Roux 2018 Posttraumatic Stress Disorder as a Significant Correlate of Voluntary Antiretroviral Treatment Interruption in Adult HIV- Infected Patients Followed up in French Hospitals: Data From the ANRS-VESPA2 National Survey (51)	Europe France	-Based on country of origin	Migrant status as a risk or protective factor for adherence to the care process	Africa; Other	Not specified	Treatment adherence Voluntary treatment interruption was defined as reporting to have voluntarily interrupted ART at least once during the previous month.	Cross-sectional study	To evaluate the association between post-traumatic stress disorder (PTSD) and voluntary treatment interruption (VTI) after adjusting for significant sociodemographic, behavioral, clinical, and psychosocial correlates of VTI, in a nationally representative survey of HIV-infected adults followed up in French hospitals.	April 2011 Januar y 2012	Patients form the ANRS-VESPA 2 survey; HIV-infected patients followed up in French hospitals	2768
Saracino 2014 Late presentation	Europe Italy	Immigrants were defined	Migrant status as a	Not specified	Not specified	Lost to follow-up; Virological response	Cross-sectional study	-To verify if opportunities for diagnosis, clinical	1 Januar	All inpatients and outpatients attending	716

and Lost to follow-up of immigrants newly diagnosed with HIV in the HAART era (52)		as foreign- born individuals from non- European countries; however, patients from recently included European Union countries or those applying for membership were also included in the immigrant group.	risk or protective factor for adherence to the care process And Study of the factors of adherence to the care process among migrants			Plasma viral load (pVL) mean decrease (log copies /mL) at 1, 3 and 6 months from treatment initiation		management and response to antiretroviral therapy differed between HIV- infected foreigners and natives by analyzing routine practices at an Italian Infectious Disease Clinic in the period from 2006-2010	y 1996 31 Decem ber 2010	the study's Infectious Disease Clinic between January 1, 1996 and December 31, 2010 with an initial HIV diagnosis.	
Saracino 2016, Increased risk of virologic failure to the first antiretroviral regimen in HIV- infected migrants compared to natives: data from the ICONA cohort (53)	Europe Italy	Migrants were defined as those born outside Italy, based on their geographical origin (derived from nationality or from country of birth or origin.)	Migrant status as a risk or protective factor for adherence to the care process; Study of the factors of adherence to the care process among migrants	Africa; Southeast Asia; South America/ Central America; Not specified	Not specified	Virological response Time to failure after at least six months of ART	Cohort study	To evaluate possible disparities in access and/or risk of virological failure to first line ART regimens in migrants compared to Italian-born patients enrolled in the ICONA cohort, and to assess determinants of virological failure among migrants living with HIV Outcomes: *Time to virological failure (VF) after at least six months of therapy, defined as the first of two consecutive VL > 200 copies/ml *Treatment discontinuation for any reason *Treatment failure: confirmed VL of > 200 copies/mL	Januar y 2004 -March 2014	-Patients from the ICONA Foundation Study -all native and migrant treatment naive patients -from January 2004 to March 2014	5773

Sauceda 2019 From Theory to Application: A Description of	United States California	Not specified	Study of the factors of adherence to the care	South America/ Central America	Not specified	Retention in care	Qualitative study	To describes a 5-year, multisite transnational initiative to address the aforementioned challenges	2013 2018	-Latinos - newly diagnosed HIV positive - left care during the	10 demon stratio ns
Transnationalism in Culturally- Appropriate HIV Interventions of Outreach, Access, and Retention Among Latino/a Populations (54)			process among migrants	Anterea				to reducing HIV health disparities		study period	sites
Servin 2012 Choosing sides: HIV health care practices among shared populations of HIV-positive Latinos living near the US- Mexico border (55)	United States California	Mexican origin or other Latin American origin, residing in San Diego for at least 1 month in the prior year	Migrant status as a risk or protective factor for adherence to the care process	South America/ Central America	Not specified	Treatment adherence HIV health care- seeking practices: Unsupervised changes to ART treatment	Cross-sectional study	To compare HIV health care utilization practices and patterns among HIV- positive Latinos receiving HIV care in San Diego with those receiving HIV care in Tijuana	July 2009 Januar y 2010	- HIV positive -Mexican origin or other Latin America origin -at least 18 years old -residing in Tijuana or San Diego for at least 1 month in the prior year and able to speak Spanish or English	233
Sheehan 2017 Black-White and Country of Birth Disparities in Retention in HIV Care and Viral Suppression among Latinos with HIV in Florida, 2015 (56)	United States Florida	Reported as Latino or Hispanic the Florida Department of Health HIV reporting system ; Country of birth	Migrant status as a risk or protective factor for adherence to the care process	South America/ Central America	Not specified	Retention in care; Virological response Retention in care during 2015 : evidence of engagement in care two or more times, at least three months apart, during 2015 Engagement in care : evidence of at least one laboratory test, a prescription fill through the AIDS Drug Assistance Program (ADAP) or a physician visit documented in one of the Ryan White databases. HIV viral load suppression during 2015 was defined (and calculated by the FDOH) as having evidence of a	Cohort study	To identify potential disparities by race and by country of birth in retention in HIV care an HIV viral load suppression among Latinos with HIV	2000-2014	Meeting CDC guideline criteria for HIV; identified as Latino or Hispanic; aged ≥13 years	12106

Sheehan 2018

Site, and

Role of Country of Birth, Testing

Neighborhood Characteristics on

Non-linkage to HIV Care Among Latinos (57)

United

States Florida -Patients

Latino

reported as

Hispanic or

ethnicity from the Florida

Department of health

Study of the

adherence to

factors of

the care

process among

migrants

		viral load< 200 copies/mL in the most recent					
South America/ Central America	Not specified	laboratory test Retention in care Linkage to HIV care was defined as a laboratory test (HIV viral load or CD4) within three months of HIV diagnosis	Cohort on mandatory reporting data	To estimate disparities in linkage to human immunodeficiency virus (HIV) care among Latinos by country/region of birth, HIV testing site and neighborhood characteristics Outcome: Linkage to HIV care was defined as a laboratory test (HIV viral load or CD4) within three months of HIV diagnosis	2014 2015	Latino individuals; Diagnosed during 2014 or 2015; Aged 13 or older	2659
Not specified	Not specified	Treatment adherence; Virological response Adherence for each drug: leftover medication of former refills + collected medication at refill/prescribed medication per day/number of days between refills. Non-adherence: <100% adherence	Cohort study	To compare adherence to cART and virological treatment response and various psychosocial risk factors for non-adherence between native and immigrant HIV-infected patients in the Netherlands.	Januar y 2008 - June 2009	Adults non-pregnant; started cART after 1997; on cART for at least 6 months; sufficient fluency in Dutch of English to participate in a face-to- face interview.	201
Africa	Not specified	Lost to follow-up Lost to follow-up: no documented	Cross-sectional study	To examine the association between LTFU from HIV care in the calendar year	Januar y 2000 Decem	Pregnant women infected by HIV; Born in SSA: white UK born	5930

								within three months of HIV diagnosis			
Sumari-de Boer 2012 HIV stigma and depressive symptoms are related to adherence and virological response to antiretroviral treatment among immigrant and indigenous HIV infected patients (58)	Europe Netherlands	-Country of birth outside the Netherlands	Migrant status as a risk or protective factor for adherence to the care process	Not specified	Not specified	Treatment adherence; Virological response Adherence for each drug: leftover medication of former refills + collected medication at refill/prescribed medication per day/number of days between refills. Non-adherence: <100% adherence	Cohort study	To compare adherence to cART and virological treatment response and various psychosocial risk factors for non-adherence between native and immigrant HIV-infected patients in the Netherlands.	Januar y 2008 - June 2009	Adults non-pregnant; started cART after 1997; on cART for at least 6 months; sufficient fluency in Dutch of English to participate in a face-to- face interview.	201
Tariq 2016 Lost to follow-up After Pregnancy Among Sub- Saharan Africa- Born Women Living With Human Immunodeficienc y Virus in England, Wales and Northern Ireland: Results From a Large	Europe England, Wales and Northern Ireland	Born outside United Kingdom, in Sub Saharan Africa	Migrant status as a risk or protective factor for adherence to the care process	Africa	Not specified	Lost to follow-up Lost to follow-up: no documented attendance for HIV care at an NHS clinic in EW&NI during the calendar year after confirmed or estimated end of pregnancy	Cross-sectional study	To examine the association between LTFU from HIV care in the calendar year after pregnancy and maternal ethnicity region of birth and maternal duration of residence in the United Kingdom	Januar y 2000 Decem ber 2009	Pregnant women infected by HIV; Born in SSA; white UK born women; included in two cohorts: National Study of HIV in Pregnancy (NSPC) and Survey of Prevalent Infections Diagnosed (SOPHID)	5930

National Cohort (59)											
Taylor 2014 Patterns of geographic mobility predict barriers to engagement in HIV care and antiretroviral treatment adherence (60)	United States Texas	Self- identified as Dominican	Study of the factors of adherence to the care process among migrants	Caribbean	Not specified	Treatment adherence	Qualitative study	To determine how mobility impacts two HIV care outcomes, specifically, engagement in HIV care and adherence to antiretroviral therapy	2010 2012	HIV-positive at least 21 years of age self- identifying as Dominican ; all participants had received ART continuously for six months and had ≥ 1 travel event within the previous six months.	36
Teira 2019 Losses to follow- up of HIV- infected people in the Spanish VACH cohort over the period between 2013 and 2014: The importance of sociodemographi c factors (61)	Europe Spain	Not specified	Migrant status as a risk or protective factor for adherence to the care process	Not specified	Not specified	Lost to follow-up Lost to follow-up: The frequency of consultation visits recommended in the clinical practice guidelines, consensus among project investigators with extensive experience in the field of care for HIV infection and the available experience	Cross-sectional study	To estimate the proportion of losses to follow-up and identify the main socio- demographic variables related to patients in the Spanish VACH cohort	Januar y 2012- Decem ber 2012	HIV-infected people from the VACH cohort (All HIV-positive patients who came to 14 sites in Spain for their first outpatient visit from January 1997 to 31 December 2000 were included in the study)	14 723
Thierfelder 2012 Participation, characteristics and retention rates of HIV- positive immigrants in the Swiss HIV Cohort Study (62)	Europe Switzerland	Geographical origin different from North- western countries and Europe	Migrant status as a risk or protective factor for adherence to the care process	Africa; Southeast Asia; South America/ Central America; Caribbean	Not specified	Lost to follow-up Lost to follow-up: no further cohort visit during at least 1 year after the last visit.	Cohort study	To study the demographic and clinical characteristics, the time trends and the retention rates of cohort participants of different geographical origins	1 Januar y 1996 31 Decem ber 2008	HIV-infected patient from the Swiss Cohort Study (SHCS)	7480
Thomadakis, 2024 HCV Cascade of care in HIV/HCV Co-Infected Individuals: Missed Opportunities for Micro- Elimination (63)	Europe Greece	Not specified Migration background	Migrant status as a risk or protective factor for adherence to the care process	Not specified	Not specified	Lost to follow-up	Cohort study	To construct the CoC of HIV/HCV co-infected individuals and to identify potential areas of improvement in Greece	28 Januar y 2020 31 Dece mber 2023	People with HIV who tested positive for HCV according to anti-HCV tests	1213
Tilley 2015 Treatment and	Australia	-defined by country of	Migrant status as a	Africa; Southeast	Not specified	Lost to follow-up; Virological response	Cohort study	To describe the demographics and clinical	1999 2013	All participants enrolled in AHOD between 1999	1173

disease outcomes of migrants from low- and middle- income countries in the Australian HIV Observational Database cohort (64)		birth (COB). Country of birth was categorized into country- specific income groupings based on World Bank gross national income (GNI) indicators	risk or protective factor for adherence to the care process	Asia; South America/ Central America; Caribbean		Lost to follow-up: patient had not been seen at the clinic for at least one year. First viral suppression= HIV RNA viral load<400 copies/mL.		characteristics of participants in the Australian HIV Observational Database (AHOD) cohort born in low and middle-income countries (compared with participants born in Australia (and other high- income countries		and 2013 who attended a clinical site that routinely collected country of birth (COB) information	
Torrecilla García 2016 Clinical, epidemiological and treatment failure data among HIV-1 non-B-infected patients in the Spanish AIDS Research Network Cohort (65)	Europe Spain	Country of origin different from Spain	Migrant status as a risk or protective factor for adherence to the care process	Africa; Southeast Asia; South America/ Central America; Other	Not specified	Lost to follow-up; Virological response Treatment failure: patients with detectable plasmatic VL higher than 50 HIV-1-RNA copies/ML after 24 weeks of ARV exposure in at least two consecutive viraemia quantifications within three months. Lost to follow-up : subjects without available data during the previous year of follow-up for whom there was no evidence of death.	Cohort study	To analyze the clinical and epidemiological features in HIV-1 non-B- infected patients enrolled in the Cor RIS cohort from 2004 to 2008	From Januar y 2004 To Octob er 2008	Patients from the CoRIS cohort; Subjects over 13 years old visited in 31 hospitals and one HIV diagnosis center located throughout Spain since January 2004; HIV-1 non B variants with available pol sequence at enrollment	82
VanBeckhoven 2015 Good continuum of HIV care in Belgium despite weaknesses in retention and linkage to care among migrants (66)	Europe Belgium	Nationality different from Belgian Nationality	Migrant status as a risk or protective factor for adherence to the care process	Africa; Other	Not specified	Retention in care; Virological reponse Linkage to HIV care: having at least one viral load (VL) or CD4 count recorded within 1 year of HIV diagnosis with a window of 7 days for VL records to prevent incorrectly counting VL measurements performed at the	Descriptive epidemiologica l studies (cross- sectional, longitudinal)	To estimate the proportion in each stage of the continuum of HIV care in Belgium among diagnosed PLHIV and analyzed factors associated with attrition at each respective stage	2007 2011	HIV patients from the national registry of new HIV diagnoses records and the Belgian HIV cohort study	4117

Vignier 2018 Refusal to provide healthcare to sub- Saharan migrants in France: a comparison according to their HIV and HBV status (67)	Europe France	Migrants born in sub- Saharan Africa	Study of the factors of adherence to the care process among migrants	Africa	Not specified	time of diagnosis as initial HIV care visit. Retention in care: the proportion of patients in care in 2010, those having one CD4 or VL measurement during that year, who had at least one record of CD4 or VL in 2011. Suppressed viral load was defined as the last measured VL<50 copies/mL. Retention in care	Cohort study	To assess the frequency of reported healthcare refusal and to study its determinants according to HIV and CHB status and social situation	Febru ary 2012 May 2013	Born in sub-Saharan Africa; aged 18-59; diagnosed at least three months prior to inclusion for the HIV and CHB groups and for the reference group, if the latter were not diagnosed with either HIV or HBV. Exclusion criteria: major cognitive or health impairments	2459
Winston 2013 Evaluation of longitudinal clinical outcomes and adherence to care among HIV- infected refugees (68)	United States Rhode Island	Refugees or asylees according to the United Nations High Commission for Refugees (UNHCR)	Migrant status as a risk or protective factor for adherence to the care process	Africa	Not specified	Retention in care; Virological response Number of appointments scheduled per year, number of appointments kept per year, proportion of scheduled appointments kept per year as a minimum clinical standard of appointments	Cohort study	To identify differences in the long-term outcomes of viral load (VL) suppression and immune restoration between refugees and non- refugees, and to identify the contributing factors that highlight potential targets for interventions to improve care for this population.	2000 2008	HIV 1 infected persons from sub-Saharan Africa classified as refugees or asylees according to the UNHCR who established care at the Miriam Hospital immunology center between 2000 and 2008	153
Zamudio-Haas 2019 "No Estas Solo":	United States California	Not specified	Study of the factors of adherence to	South America/ Central	Not specified	Retention in care	Qualitative study	To explore how interventions applied a transnational framework and	Octob er 2015	-Mexicans or Puerto Ricans, using a transnational framework	48 clients and

Navigation	the care	America		incorporated Latino cultural	July	27
Programs Support	process			constructs into programs	2016	interv
Engagement in	among			designed to promote linkage		ention
HIV Care for	migrants			and retention in care		provid
Mexicans and						ers
Puerto Ricans						
Living in the						
Continental U.S						
(69)						

Abbreviations: ADAP AIDS Drug Assistance ;ART antiretroviral treatment ; cART combined AntiRetroviral Treatment ; CBA Canadian born aboriginal ; CBNA Canadian born non-aboriginal ; CDC Centers for Disease Control and Prevention ; COB country of birth ; DOT Directly observed therapy ; FHDH French Hospital Database on HIV ; HADS Hospital Anxiety Depression Scale ; LCA latent class analysis ; MCI Medical Care interruption ; NAME North Africa and Middle East ; OPC Outpatient Clinic ; PTSD post-traumatic stress disorder ; pVL plasma viral load ; LCA latent class analysis ; SHCS Swiss HIV Cohort; SSA sub-Saharan Africa; TGW transgender women; UNHCR United Nations High Commission for Refugees ; VTI voluntary treatment interruption ;WEWC Western Europe and Western Countries ; YSMSM young men who have sex with men EE Eastern Europe

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S2: Search string.

PUBMED

(("HIV"[MH] OR "HIV"[TIAB]) AND ("Treatment Failure"[MH] OR "Treatment Failure"[TIAB] OR "treatment refusal"[MH] OR "treatment refusal" [TIAB] OR "treatment adherence and compliance" [MH] OR "treatment compliance" [TIAB] OR "treatment adherence" [TIAB] OR "Retention in care" [MH] OR "Retention in care" [TIAB] OR "Treatment outcome" [MH] OR "Treatment outcome" [TIAB] OR "Lost-to follow up" [MH] OR "Lost-to follow up" [TIAB] OR "Continuity of Patient Care"[MH] OR "Continuity of Patient Care" [TIAB]) AND ("transients and migrants"[MH] OR transient*[TIAB] OR migrant*[TIAB] OR "refugee*" [MH] OR "refugee*" [TIAB] OR "emigrants and immigrants » [MH] OR «emigrants »[TIAB] OR "immigrant*" [TIAB] OR « emigration and immigration »[MH] OR "emigration"[TIAB] OR "immigration" [TIAB] OR "asylum seeker*" OR "asylum seeker*"[TIAB])

PSYCHINFO

TI "HIV" AND TI ("treatment failure" OR "treatment refusal" OR "treatment adherence and compliance" OR "treatment compliance" OR "treatment adherence" OR "retention in care" OR "treatment outcome" OR "lost to follow up" OR "continuity of patient care") AND TI ("transients and migrants" OR "transient*" OR "migrant*" OR "refugee*"OR"emigrants and immigrants" OR "emigrant*"OR"immigrant*"OR"emigration and immigration" OR "emigration" OR "immigration" OR "asylum seeker")

AB "HIV" AND AB ("treatment failure" OR "treatment refusal" OR "treatment adherence and compliance" OR "treatment compliance" OR "treatment adherence" OR "retention in care" OR "treatment outcome" OR "lost to follow up" OR "continuity of patient care") AND AB ("transients and migrants" OR "transient*" OR "migrant*" OR "refugee*"OR"emigrants and immigrants" OR "emigrant*"OR"immigrant*"OR"emigration and immigration" OR "emigration" OR "immigration" OR "asylum seeker")

CINAHL

TI "HIV" AND TI ("treatement failure" OR "treatment refusal" OR"treatment adherence and compliance" OR " treament compliance" OR "treatment adherence" OR "retention in care" OR "treatment outcome" OR "lost to follow up" OR" continuity of patient care") AND TI ("transients and migrants" OR "transient*" OR "migrant*" OR "refugee*" OR "emigrants and immigrants*" OR "emigrants*" OR "immigrantµ" OR "emigration and immigration" OR "emigration" OR "immigration" OR "asylum seeker*")

AB "hiv" AND AB ("treatement failure" OR "treatment refusal" OR"treatment adherence and compliance" OR " treament compliance" OR "treatment adherence" OR "retention in care" OR "treatment outcome" OR "lost to follow up" OR" continuity of patient care") AND AB ("transients and migrants" OR "transient*" OR "migrant*" OR "refugee*" OR "emigrants and immigrants*" OR "emigrants*" OR "immigrantµ" OR "emigration and immigration" OR "emigration" OR "immigration" OR "asylum seeker*")

EMBASE

('human immunodeficiency virus':ab,ti,kw AND [humans]/lim AND [embase]/lim AND [2010-2024]/py) AND (('migration':ab,ti,kw OR 'refugee':ab,ti,kw OR «migrant»:ab,ti,kw OR «migration»:ab,ti,kw OR 'asylum seeker':ab,ti,kw) AND [embase]/lim AND [2010-2024]/py) AND (('treatment failure':ab,ti,kw OR 'treatment refusal':ab,ti,kw OR 'patient compliance':ab,ti,kw OR 'retention in care':ab,ti,kw OR 'treatment outcome':ab,ti,kw OR 'follow up':ab,ti,kw OR 'patient care':ab,ti,kw) AND [humans]/lim AND [embase]/lim AND [2010-2024]/py)

GOOGLE SCHOLAR:

"HIV" AND "migrants" and " care process " and "High-income countries"

S3: Quality assessment of included studies using the Mixed Methods Appraisal Tool

	SCREEN	ING QUESTIONS		3. NOI	N-RANDOMIZED S	TUDIES	
Authors' names Year of publication Title	S1. Are there clear research questions?	S2. Do the collected data allow to address the research questions?	3.1. Are the participants representative of the target population?	3.2. Are measurements appropriate regarding both the outcome and intervention (or exposure)?	3.3. Are there complete outcome data?	3.4. Are the confounders accounted for in the design and analysis?	3.5. During the study period, is the intervention administered (or exposure occurred) as intended?
Abgrall 2013 Visiting One's Native Country : The Risks of Non adherence in HIV- Infected Sub-Saharan Migrants (1)	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Abgrall 2014 Risk factors for adherence failure in HIV-infected sub-Saharan migrants living in France and travelling back to their native country (2)	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Arora 2024 Patient-reported outcomes and experiences of migrants enrolled in a multidisciplinary HIV clinic with rapid, free, and onsite treatment: the 'ASAP' study (4)	Yes	Yes	Yes	Yes	No	Yes	Yes
Been 2016 Risk Factors for Non-Adherence to cART in Immigrants with HIV living in the Netherlands: Results from the Rotterdam Adherence project (6)	Yes	Yes	No	Yes	Yes	Yes	Yes
Been 2017 Self-reported adherence and pharmacy refill adherence are both predictive of an undetectable viral load among HIV- infected migrants receiving cART (7)	Yes	Yes	Yes	Yes	No	Yes	Yes
Been 2019 Anxiety, depression and treatment adherence among HIV-infected migrants (8)	Yes	Yes	Yes	Yes	No	Yes	Yes
Been 2020 Feasibility of four interventions to improve treatment adherence in migrants living with HIV in the Netherlands (9)	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Borchmann 2022 Length of stay in Denmark before HIV	Yes	Yes	Yes	Yes	Yes	No	Yes

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diagnosis and linkage to care: a population-based study of migrants living with HIV, Denmark, 1995 to 2020 (10)							
Castelan 2023 Intentional but not Unintentional Medication Non-adherence was related with beliefs about medicines among a multi-ethnic sample of people with HIV(11)	Yes	Yes	Yes	Yes	Yes	No	Yes
COHERE Immunological and virological response to antiretroviral treatment in migrant and native men and women in Western Europe; is benefit equal for all? (12)	Yes	Yes	Yes	Can't tell	Yes	Yes	Yes
Cyrus 2017 Disparity in Retention in Care and Viral Suppression for Black Caribbean-Born Immigrants Living with HIV in Florida (13)	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Demeke 2018 HIV Infection-Related Care Outcomes among US-born and Non-US born Blacks with Diagnosed HIV in 40 US Areas: The national HIV Surveillance system, 2016 (15)	Yes	Yes	Yes	Yes	Yes	No	No
Demeke 2021 Antiretroviral prescription, retention in care and viral suppression according to place of birth among adults with diagnosed HIV in the United States 2015-2017, medical monitoring project (16)	Yes	Yes	No	Yes	Yes	No	Yes
De Monteynard 2015 Late cART initiation in Migrant Men from Sub-Saharan Africa without advanced HIV disease in France (17)	Yes	Yes	Yes	Yes	Yes	Yes	Yes
De Monteynard 2016 Influence of geographic origin, sex, and HIV transmission group on the outcome of first-line combined antiretroviral therapy in France (18)	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Elbirt 2014 Direct monthly highly active antiretroviral therapy supply: a method to increase patient's adherence and outcome (19)	Yes	Yes	Yes	Yes	Yes	No	Yes

			[
Elinav 2012 HIV/AIDS profile and realities at a regional antiretroviral therapy clinic in Jerusalem: 12 years analysis (20)	Yes	Yes	Yes	Yes	No	No	Yes
Fournier 2019 Incidence of risk factors for medical care interruption in people living with HIV in recent years (21)	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Gagliardini 2024 Impact of COVID-19 pandemic on retention in care of native and migrant people with HIV in the ICONA cohort (22)	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Gatey 2019 Does region of origin influence the timing and outcome of first-line antiretroviral therapy in France ? (23)	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Gebreegziabher 2020 The role of Neighborhood Poverty in the Association between Foreign-Born status and HIV Care Continuum Outcomes in Alameda County, California (24)	Yes	Yes	Yes	Yes	No	Yes	Yes
Helleberg 2013 HIV Care in the Swedish-Danish HIV cohort 1995-2010, Closing the Gaps (26)	Yes	Yes	Yes	Yes	Can't tell	No	Yes
Ivanova 2016 Preliminary Findings on the Association Between Symptoms of Depression and Adherence to Antiretroviral Therapy in Individuals Born Inside Versus Outside of Canada (28)	Yes	Yes	No	Yes	Yes	Yes	No
Jaries 2017 Population movements and the HIV cascade in recently diagnosed patients at the French Guiana-Suriname Border (29)	Yes	Yes	Yes	Yes	Yes	No	Yes
Kankou 2019 Factors Associated with Virological Rebound in HIV-Positive Sub-Saharan Migrants Living in France After Traveling Back to Their Native	Yes	Yes	No	Yes	Yes	Yes	Yes

Inequalities in HIV disease management and progression in migrants from Latin America and sub-

Country: ANRS-VIHVO 2006-2009 Study (30)							
Krankowska 2024 Comparison between patients who interrupted ART and those with late HIV diagnosis (31)	Yes						
Keiser 2012 Outcomes of Antiretroviral Therapy in the Swiss HIV Cohort Study: Latent Class Analysis (32).	Yes						
Kinoshita 2018 Migrant patients living with HIV/AIDS in Japan: Review of factors associated with high dropout rate in a leading medical institution in Japan (33).	Yes	Yes	No	Yes	No	Yes	Yes
Lefebvre 2014 Antiretroviral treatment outcomes among foreign-born and Aboriginal peoples living with HIV/AIDS in northern Alberta (34).	Yes	Yes	Yes	Yes	No	Yes	Yes
Levison 2017 Foreign-born status as a predictor of engagement in HIV care in a large US metropolitan health system (35).	Yes	Yes	Yes	Yes	No	Yes	Yes
Logie 2017 Engagement in and continuity of HIV care among African and Caribbean Black women living with HIV in Ontario, Canada (37)	Yes	Yes	No	Yes	Yes	Yes	Yes
MambetDoue 2016 The Role of Mediators in the Indirect Effects of Religiosity on Therapeutic Compliance in African Migrant HIV- Positive Patients (38)	Yes						
Masindi 2018 Co-morbid Non-communicable Diseases and Associated Health Service Use in African and Caribbean Immigrants with HIV(39)	Yes						
Milz 2016 Control beliefs and health locus of control in Ugandan, German and migrated sub-Saharan African HIV infected individuals (40)	Yes	Yes	Yes	Yes	Yes	No	Yes
Monge 2013	Yes						

Saharan Africa living in Spain (41)							
Myers 2016 Antiretroviral Therapy and Viral Suppression Among Foreign-Born HIV-Infected Persons Receiving Medical Care in the United States: A Complex Sample, Cross-Sectional Survey (42).	Yes	Yes	No	Yes	Yes	Yes	Yes
Parisey 2019 HIV Infection in North African Patients (44)	Yes	Yes	Yes	Yes	No	Yes	Yes
Pérez-Molina 2012 Response to combined antiretroviral therapy according to gender and origin in a cohort of naive HIV-infected patients: GESIDA-5808 study (45)	Yes						
Poon 2013 Treatment outcomes in undocumented Hispanic immigrants with HIV infection (46)	Yes						
Raho-Moussa 2019 Immunological and virological response to antiretroviral treatment in migrant and native men and women in Western Europe; is benefit equal for all? (47)	Yes						
Ridolfo 2017 Effect of Legal Status on the Early Treatment Outcomes of Migrants Beginning Combined Antiretroviral Therapy at an Outpatient Clinic in Milan, Italy (49)	Yes	Yes	No	Yes	Yes	Yes	Yes
Ross 2017 Outcomes Along the HIV Care Continuum Among Undocumented Immigrants in Clinical Care (50)	Yes						
Roux 2018 Posttraumatic Stress Disorder as a Significant Correlate of Voluntary Antiretroviral Treatment Interruption in Adult HIV-Infected Patients Followed up in French Hospitals: Data From the ANRS-VESPA2 National Survey (51)	Yes						
Saracino 2014 Late presentation and Lost to follow-up of immigrants newly diagnosed with HIV in the HAART era (52)	Yes	Yes	Yes	Yes	Yes	No	Yes

Saracino 2016,

Yes

Yes

Yes

Yes

Yes

Yes

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Yes	Yes	No	Yes	Yes	Yes	Yes
N/	V	N	N/	V	V	Yes
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Yes	Yes	Yes	Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes	Yes	Yes	Yes
V	V	V	V	V	V	Yes
res	res	res	res	res	res	res
Yes	Yes	Yes	Yes	Yes	Yes	Yes
Yes	Yes	No	Yes	Yes	Yes	Yes
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		1				
Yes	Yes	Yes	Yes	No	Yes	Yes
Yes	Yes	Yes	Yes	No	Yes	Yes
Yes	Yes	Yes	Yes	No	Yes	Yes
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(63)								
Tilley 2015 Treatment and disease outcomes of migrants from low- and middle-income countries in the Australian HIV Observational Database cohort (64)	Yes	Yes	No	Yes	Yes	Yes	Yes	
Torrecilla García 2016 Clinical, epidemiological and treatment failure data among HIV-1 non-B- infected patients in the Spanish AIDS Research Network Cohort (65)	Yes	Yes	No	Yes	No	No	Yes	
VanBeckhoven 2015 Good continuum of HIV care in Belgium despite weaknesses in retention and linkage to care among migrants (66)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Vignier 2018 Refusal to provide healthcare to sub- Saharan migrants in France: a comparison according to their HIV and HBV status (67)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Winston 2013 Evaluation of longitudinal clinical outcomes and adherence to care among HIV-infected refugees (68)	Yes	Yes	Yes	Yes	Yes	No	Yes	
	SCREEN	ING QUESTIONS	1. QUALITATIVE STUDIES					
Authors' names Year of publication Title	S1. Are there clear research questions?	S2. Do the collected data allow to address the research questions?	1.1. Is the qualitative approach appropriate to answer the research question?	1.2. Are the qualitative data collection methods adequate to address the research question?	1.3. Are the findings adequately derived from the data?	1.4. Is the interpretation of results sufficiently substantiated by data?	1.5. Is there coherence between qualitative data sources, collection, analysis and interpretation?	
Arnold 2020 Documenting best practices for maintaining access to HIV prevention, care and treatment in an era of shifting immigration policy and discourse (3)	Yes	Yes	Yes	Yes		Yes	Yes	
Arrey 2017 Perceptions of stigma and discrimination in health care settings towards sub-Saharan African migrant women living with HIV/AIDS in Belgium: a qualitative study (5)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Dang 2012 Sociocultural and Structural Barriers to Care Among Undocumented Latino	Yes	Yes	Yes	Yes	Yes	Yes	Yes	

Immigrants with HIV Infection (14)							
Guionnet 2014 Immigrant women living with HIV in Spain: a qualitative approach to encourage medical follow-up (25)	Yes						
Herrmann 2012 The impact of visa status and Medicare eligibility on people diagnosed with HIV in Western Australia (27).	Yes						
Levison 2017 "Where It Falls Apart": Barriers to Retention in HIV Care in Latino Immigrants and Migrants (36).	Yes						
Ojikutu 2018 African born women living with HIV in the United States: unmet needs and opportunities for intervention (43)	Yes						
Remien 2015 Barriers and facilitators to engagement of vulnerable populations in HIV primary care in New York City (48)	Yes						
Sauceda 2019 From Theory to Application: A Description of Transnationalism in Culturally-Appropriate HIV Interventions of Outreach, Access, and Retention Among Latino/a Populations (54)	Yes						
Taylor 2014 Patterns of geographic mobility predict barriers to engagement in HIV care and antiretroviral treatment adherence (60)	Yes	Yes	Yes	Yes	Yes	No	Yes
Zamudio-Haas 2019 "No Estas Solo": Navigation Programs Support Engagement in HIV Care for Mexicans and Puerto Ricans Living in the Continental U.S (69)	Yes						