



UNIVERSITY OF CALGARY
CUMMING SCHOOL OF MEDICINE



UNIVERSITY OF CALGARY
O'Brien Institute for Public Health
Health Technology Assessment Unit

Mapping of Women's, Children's and Adolescents' Health and Wellbeing Investment Cases in Low and Middle Income Countries

Health Technology Assessment

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1. Peer-Reviewed Literature

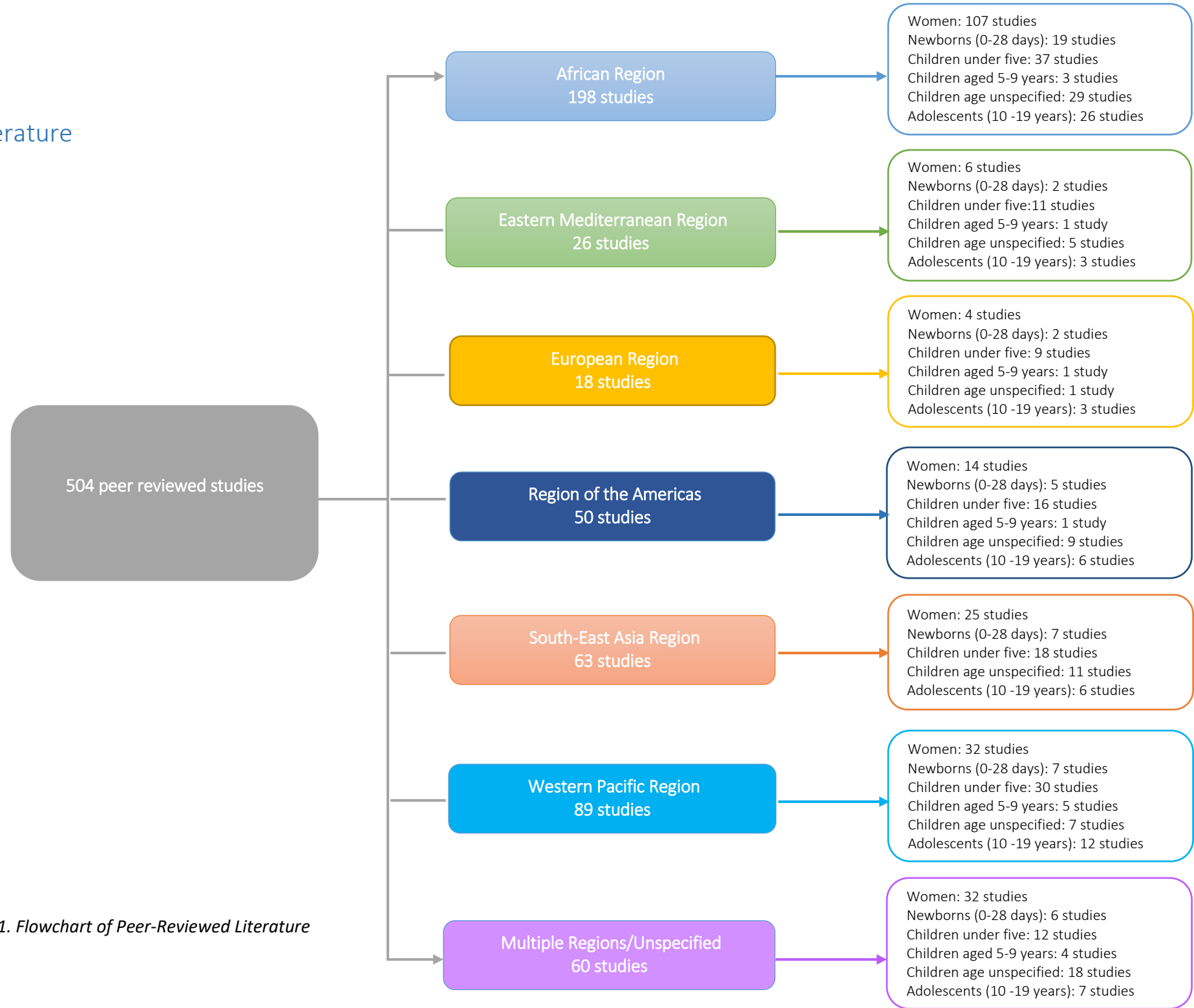
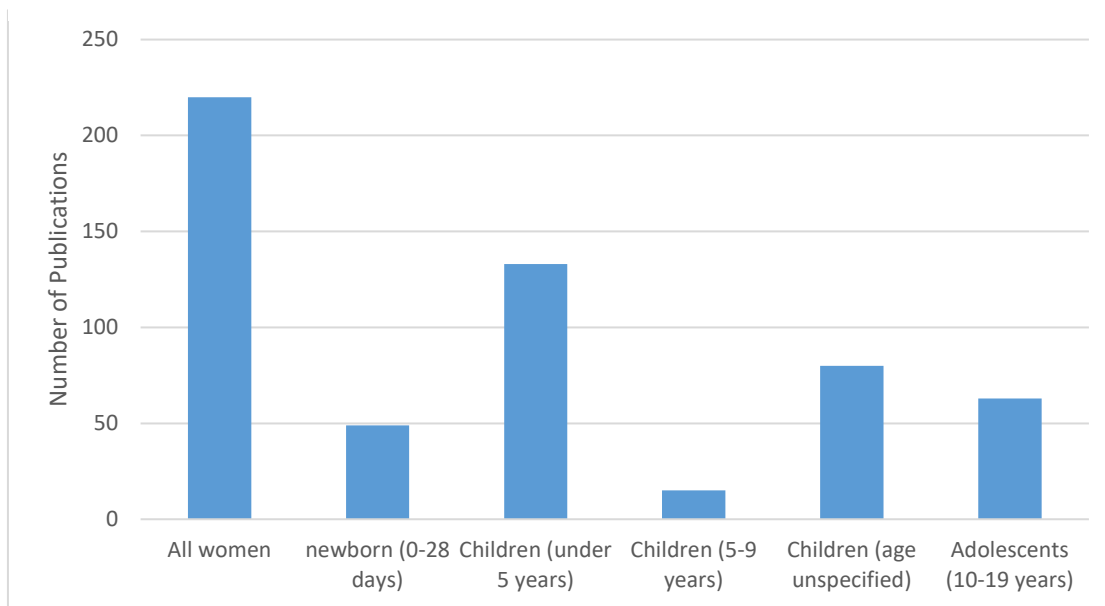


Figure 1. Flowchart of Peer-Reviewed Literature

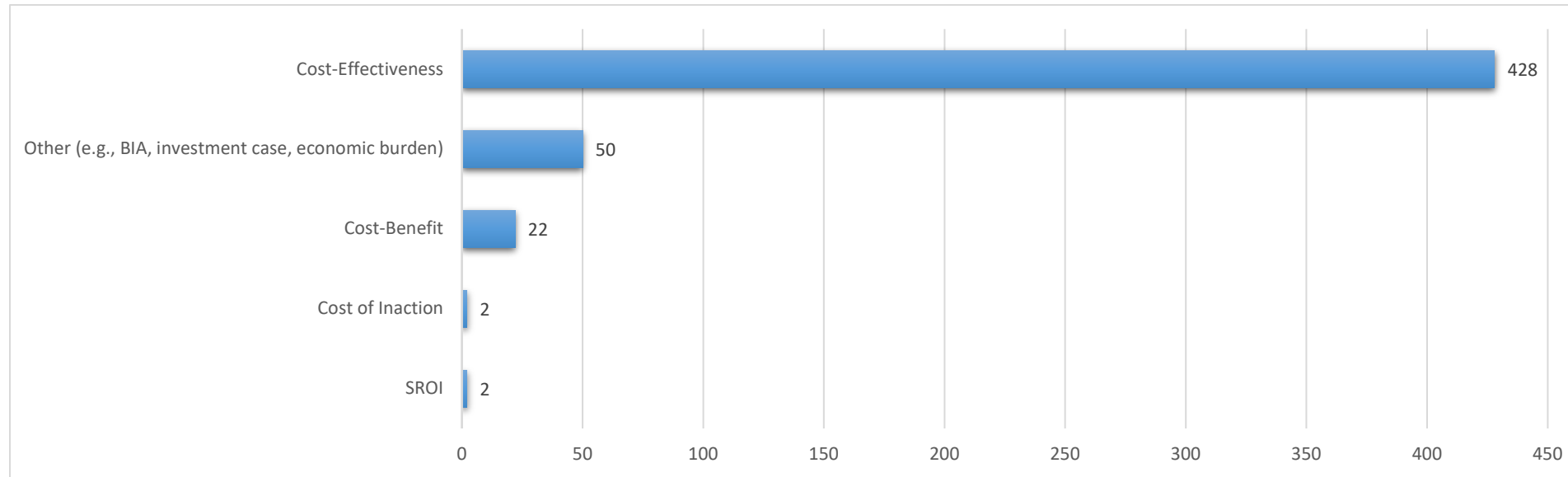
Figure 2. Number of Studies by Population



*studies could be included in more than one population.

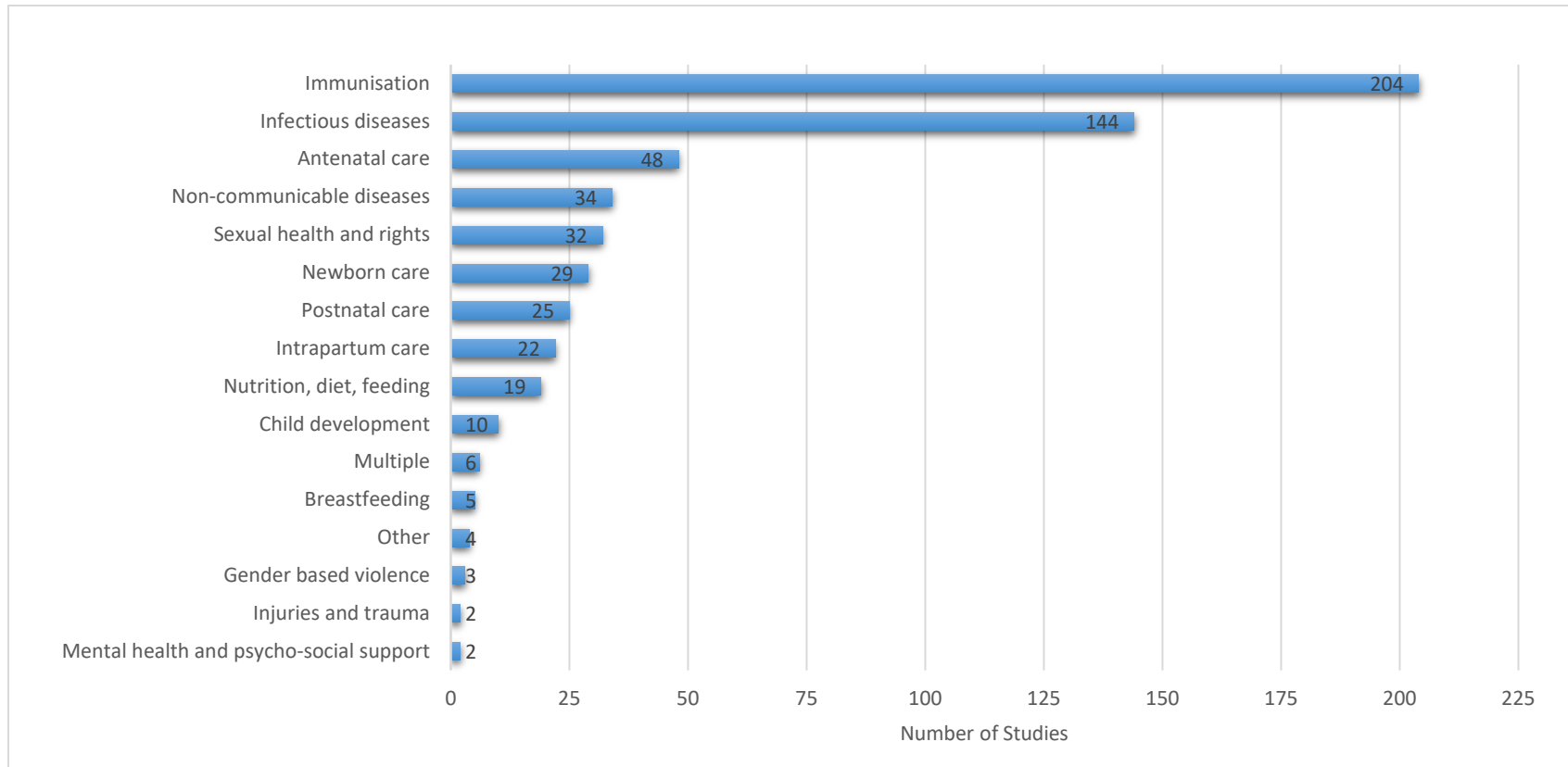
Note: This figure shows that the majority of the studies were focused on women (all women, women of reproductive age, and pregnant and lactating women) (n=220), followed by children under 5 years (n=133) and children of unspecified age (n=80). Studies on newborns and adolescents (adolescents, adolescent girls, and males up to 24 years) yielded 48 and 63 studies, respectively. Children aged 5-9 years represented the population with the fewest studies.

Figure 3. Number of Studies by Type of Analyses



Note: This figure shows that the vast majority of the included peer-reviewed literature reported cost-effectiveness of interventions. Cost of inaction (n=2) and SROI (n=2) studies were reported seldom, with fewer than 1% of included studies reporting these analysis types.

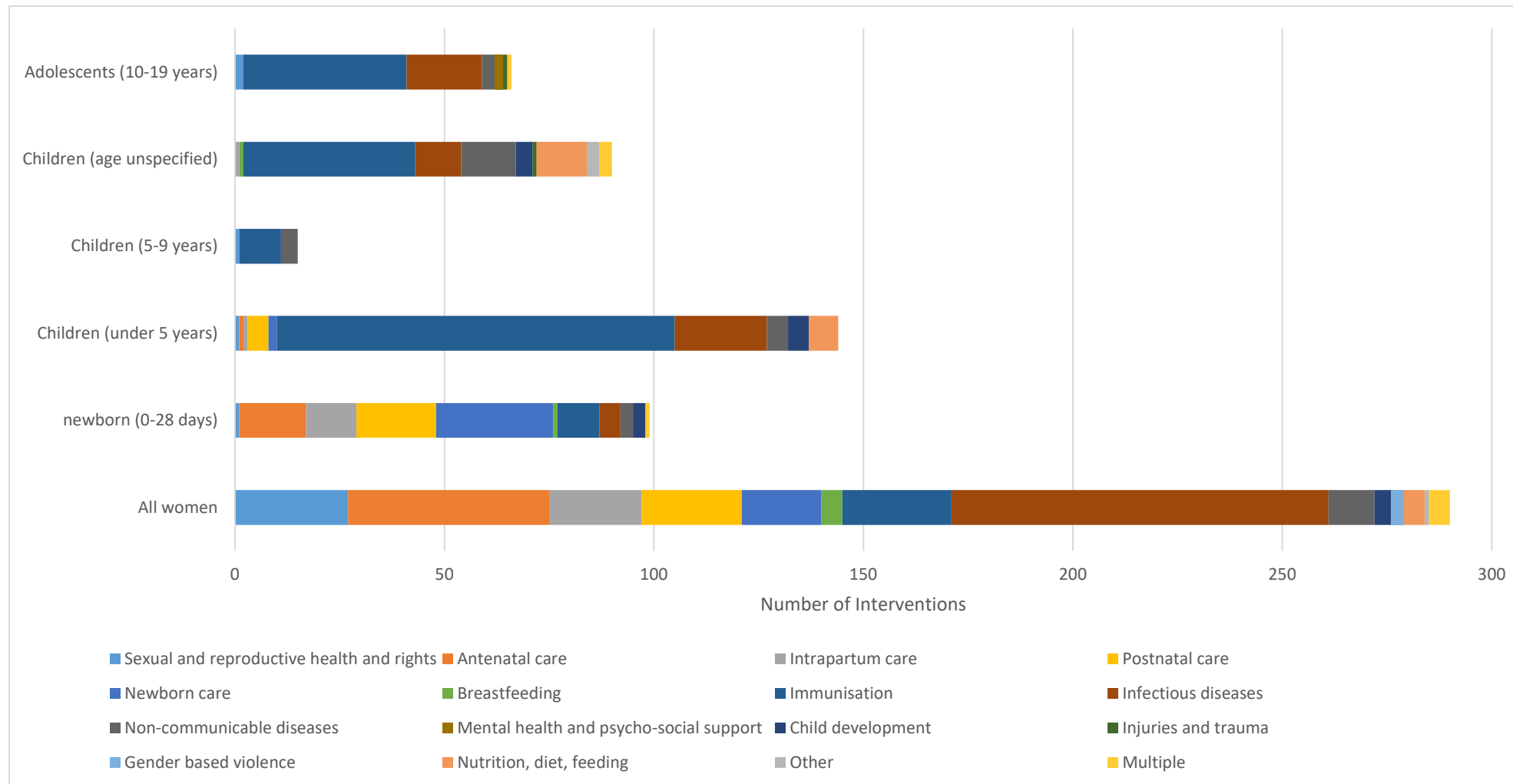
Figure 4. Number of Studies per Intervention



*studies could be included in more than one intervention.

Note: This figure shows that interventions related to immunisation and infectious disease (e.g., HIV) were the most often reported in the included studies. Gender-based violence, injuries and trauma, and mental health support were the least often reported. “Multiple” interventions represent studies with intervention packages that included multiple interventions that were not stratified. “Other” interventions include interventions that did not fit any other category, such as violence towards or against children (n=3), or interventions that were unclear from abstract (n=1).

Figure 5. Number of Interventions by Population



*studies could be included in more than one population

Note: this figure shows the breakdown of interventions by age group; for example, infectious diseases were the most common intervention in women.

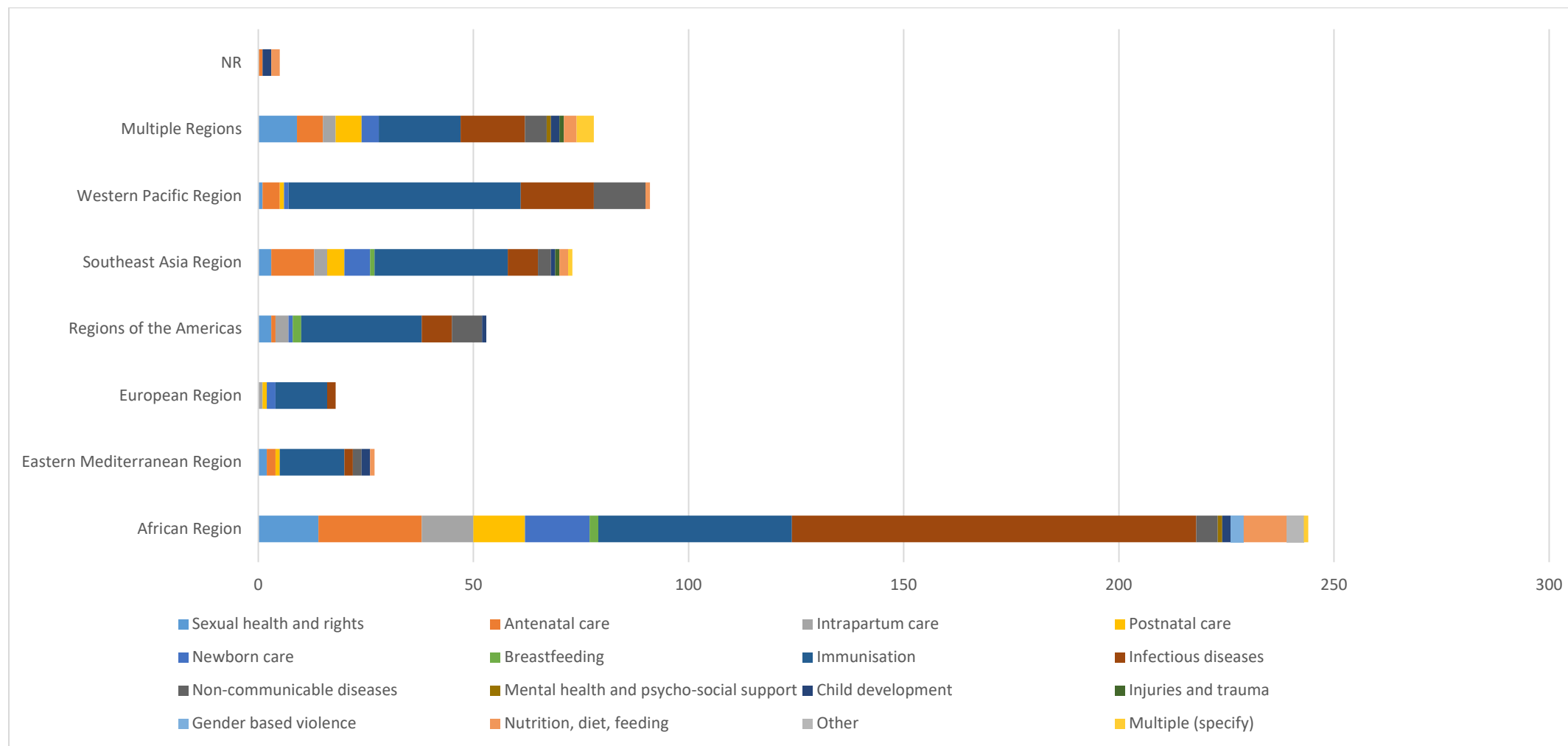
Figure 6. Knowledge Map of Evidence by Population and Intervention

	Sexual and reproductive health and rights	Antenatal care	Intrapartum care	Postnatal care	Newborn care	Breastfeeding	Immunization	Infectious diseases	Non-communicable diseases	Mental health and psycho-social support	Child development	Injuries and trauma	Gender based violence	Nutrition, diet, feeding	Other	Multiple
All women	27	48	22	24	19	5	26	90	11	0	4	0	3	5	1	5
Newborn (0-28 days)	1	16	12	19	28	1	10	5	3	0	3	0	0	0	0	1
Children (under 5 years)	1	1	1	5	2	0	95	22	5	0	5	0	0	7	0	0
Children (5-9 years)	1	0	0	0	0	0	10	0	4	0	0	0	0	0	0	0
Children (age unspecified)	0	0	1	0	0	1	41	11	13	0	4	1	0	12	3	3
Adolescents (10-19 years)	2	0	0	0	0	0	39	18	3	2	0	1	0	0	0	1

Footnote: Interventions are, for the most part, mutually exclusive. For example, HIV-related studies are categorized as “infectious disease” only. Multiple indicates a “bundle” of interventions that were not clearly stratified.

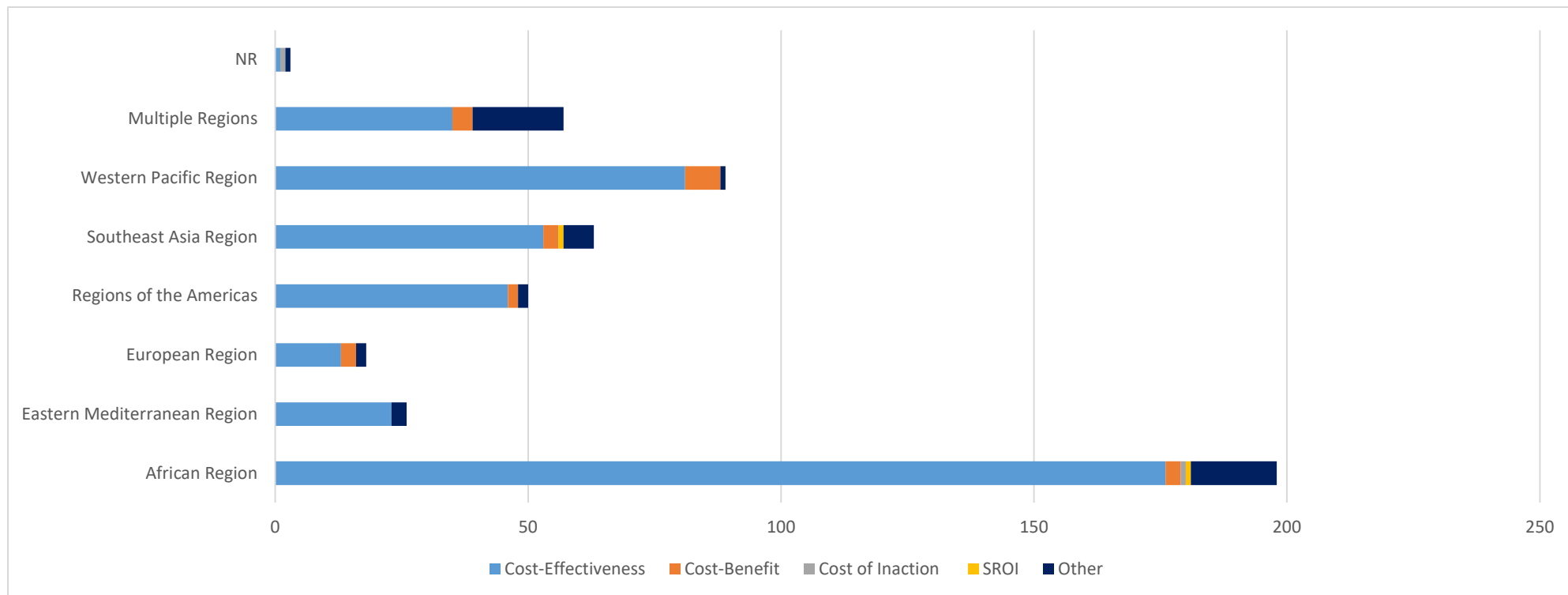
Note: this knowledge map is used to indicate evidence gaps and saturation across different interventions and populations. Red indicates no studies, while shades of blue indicate the number studies (e.g., darker shade = more studies). This knowledge maps points to various gaps in the current literature, especially for adolescents and interventions related to mental health and psycho-social support, injuries and trauma, and gender-based violence. Immunizations and infectious disease interventions are well-represented across populations; however, it is also important to consider that many of these studies are cost-effectiveness studies only.

Figure 7. Interventions Reported by WHO Region



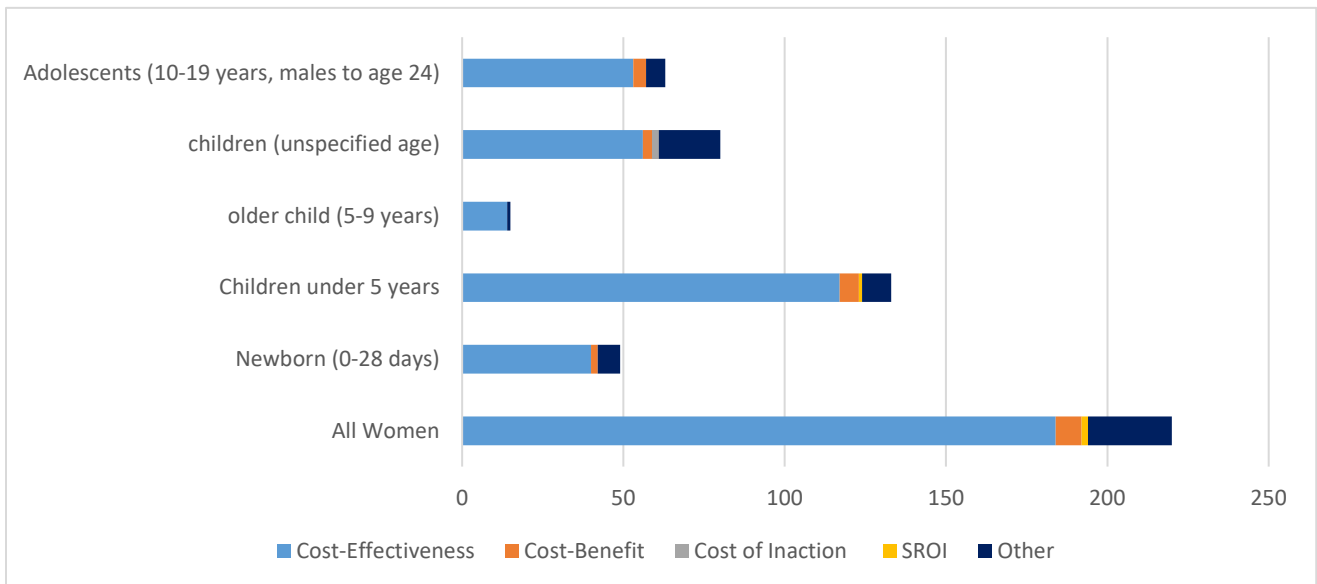
Note: Immunisations were the most frequently reported intervention in all regions except the African region, where infectious disease interventions more than doubled immunisation interventions. Mental health and psycho-social support, injuries, child health, gender –based violence , and breastfeeding are the least reported outcomes across regions.

Figure 8. Type of Analysis by WHO Region



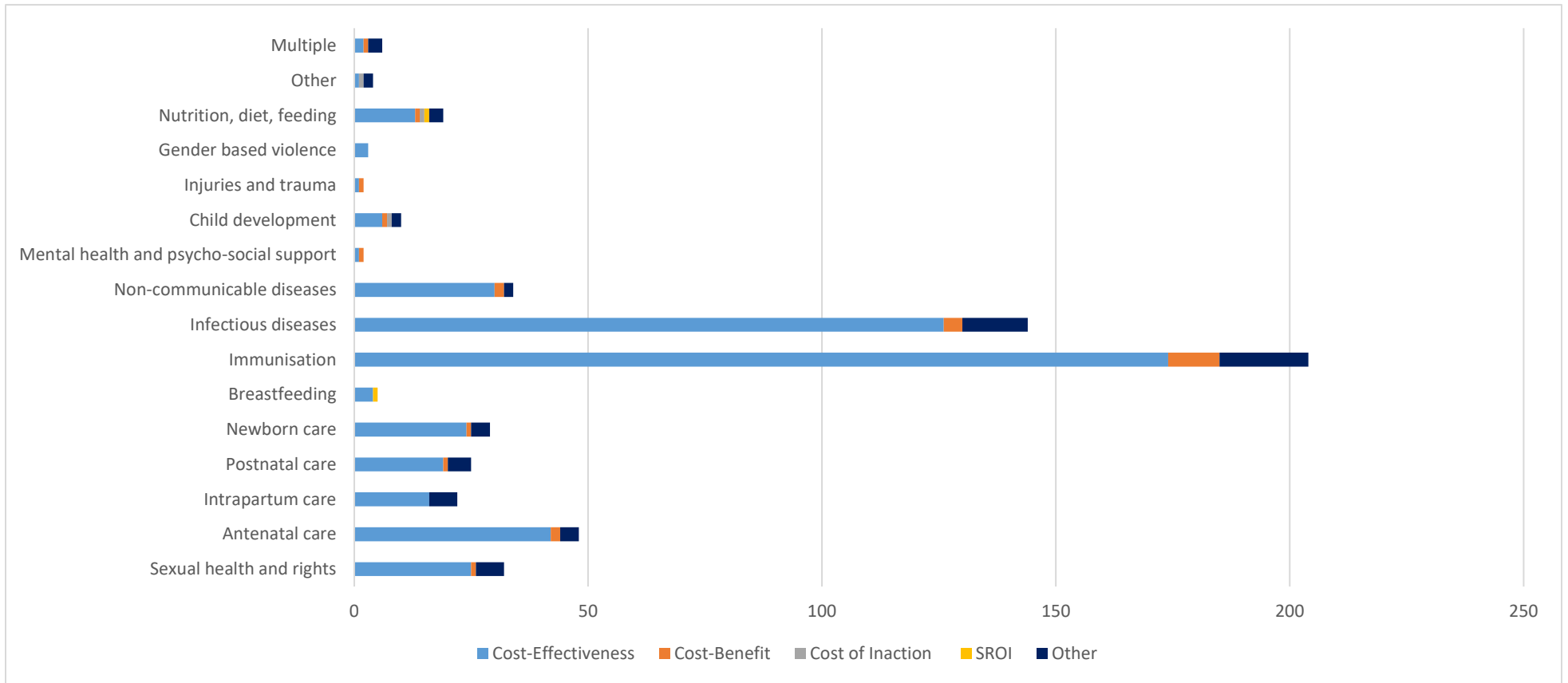
Note: Cost-effectiveness analyses were reported in the vast majority of studies reported across all regions. Cost-benefit analyses were reported in all regions except for Eastern Mediterranean. A total of two SROI (Southeast Asian and African region), and two cost of inaction (African Region and region not reported) studies were reported.

Figure 9. Type of Analysis by Population



Note: Two SROI studies were identified: one for all women, and one for children under five years. Two cost of inaction studies were reported for children of unspecified age. The vast majority of studies across all populations were cost-effectiveness, followed by cost-benefit analysis.

Figure 10. Type of Analysis by Intervention

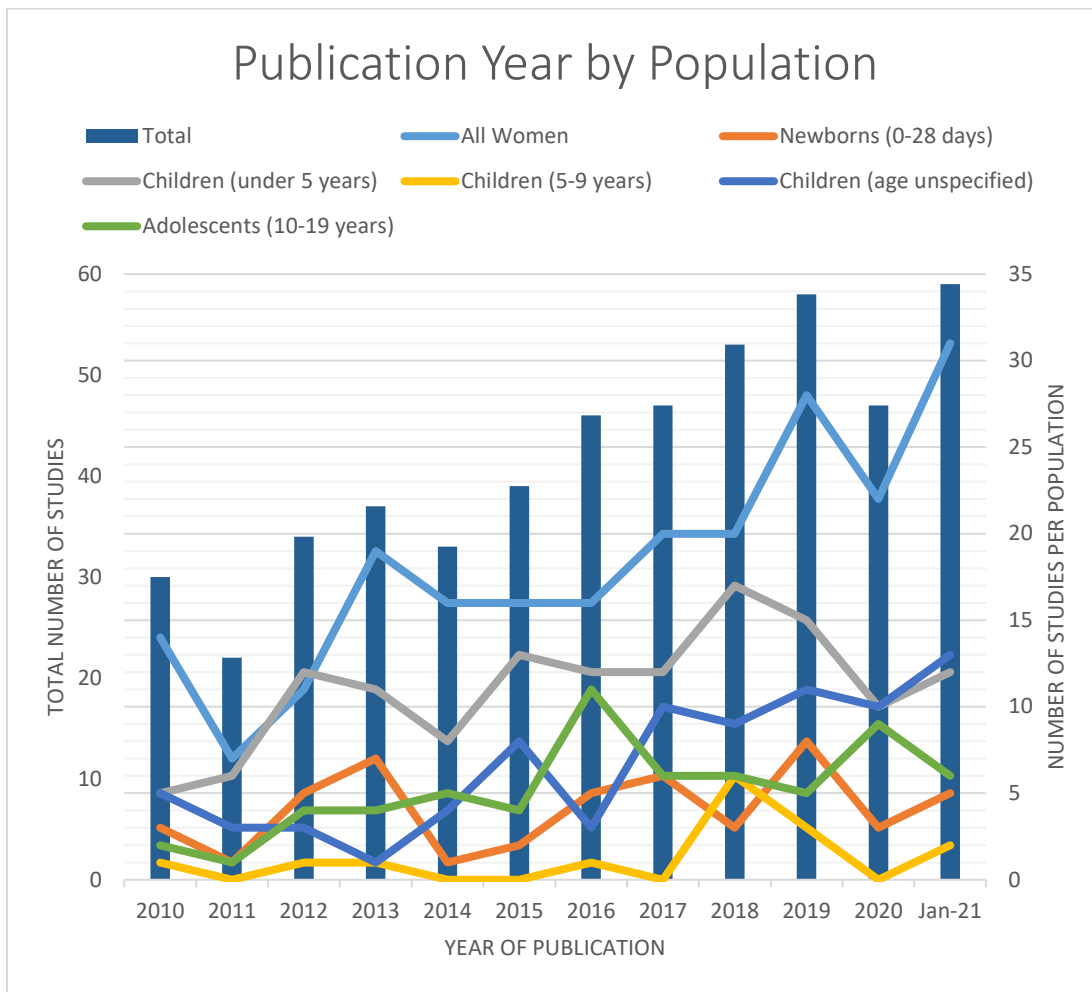


Note: One SROI was reported for breastfeeding, and nutrition, diet, and feeding. One Cost of inaction study was reported for “other” (i.e., violence against children) and child development.

Table 1. Summary of Findings for SROI and Cost of Inaction Studies (n=4)

Citation	Study Characteristics	Results as Stated in Abstract
Cost of Inaction		
Hsiao, C., et al., Violence against children in South Africa: the cost of inaction to society and the economy. <i>BMJ Global Health</i> , 2018. 3(1): p. e000573.	<p>Country (Region): South Africa (African Region)</p> <p>Population: Children (unspecified age)</p> <p>Intervention: Other - Violence against children</p>	<p>“The results showed, among others, that drug abuse in the entire population could be reduced by up to 14% if sexual violence against children could be prevented, self-harm could be reduced by 23% in the population if children did not experience physical violence, anxiety could be reduced by 10% if children were not emotionally abused, alcohol abuse could be reduced by 14% in women if they did not experience neglect as children, and lastly, interpersonal violence in the population could be reduced by 16% if children did not witness family violence. The study further estimated that the cost of inaction in 2015 amounted to nearly 5% of the country's gross domestic product.”</p>
Richter, L.M., et al., Investing in the foundation of sustainable development: pathways to scale up for early childhood development. <i>Lancet</i> , 2017. 389(10064): p. 103-118.	<p>Country (Region): NR</p> <p>Population: Children (unspecified age)</p> <p>Intervention: Early childhood development</p>	<p>“New analyses show that the burden of poor development is higher than estimated, taking into account additional risk factors. National programmes are needed. Greater political prioritisation is core to scale-up, as are policies that afford families time and financial resources to provide nurturing care for young children. Effective and feasible programmes to support early child development are now available. All sectors, particularly education, and social and child protection, must play a role to meet the holistic needs of young children.”</p>
Social Return on Investment		
Pramono, A.Y., et al., The Social Value of Implementing the Ten Steps to Successful Breastfeeding in an Indonesian Hospital: A Case Study. <i>Yale Journal of Biology & Medicine</i> , 2021. 94(3): p. 429-458.	<p>Country (Region): Indonesia (South-East Asia Region)</p> <p>Population(s): Pregnant and lactating women</p> <p>Intervention: Breastfeeding</p>	<p>“The total per annum value of investment (cost) required to implement Ten Steps in Airlangga University Hospital was US\$ 972,303. The estimate yearly benefit was US\$ 22,642,661. The social return on the investment in implementing Ten Steps in this facility was calculated to be US\$ 49 (sensitivity analysis: US\$ 18-65). Thus, for every US\$ 1 invested in Ten Steps implementation by Airlangga Hospital could be expected to generate approximately US\$ 49 of benefit.”</p>
Goudet, S., et al., Social value of a nutritional counselling and support program for breastfeeding in urban poor settings, Nairobi. <i>BMC Public Health</i> , 2018. 18(1): p. 424.	<p>Country (Region): Kenya (African Region)</p> <p>Population(s): Maternal, infant, and young children</p> <p>Intervention: Nutrition, diet, and feeding</p>	<p>“The SROI analysis revealed that the maternal, infant, young children nutrition intervention was assessed to be highly effective and created social value, particularly for mothers and their children. Positive changes that participants experienced included mothers being more confident in child care and children and mothers being healthier. Overall, the intervention had a negative social impact on daycare centers and on health care providers, by putting too much pressure on them to provide care without providing extra support. The study calculated that, after accounting for discounting factors, the input (\$USD 419,716) generated \$USD 8 million of social value at the end of the project. The net present value created by the project was estimated at \$USD 29.5 million. \$USD 1 invested in the project was estimated to bring USD\$ 71 (sensitivity analysis: USD\$ 34-136) of social value for the stakeholders.”</p>

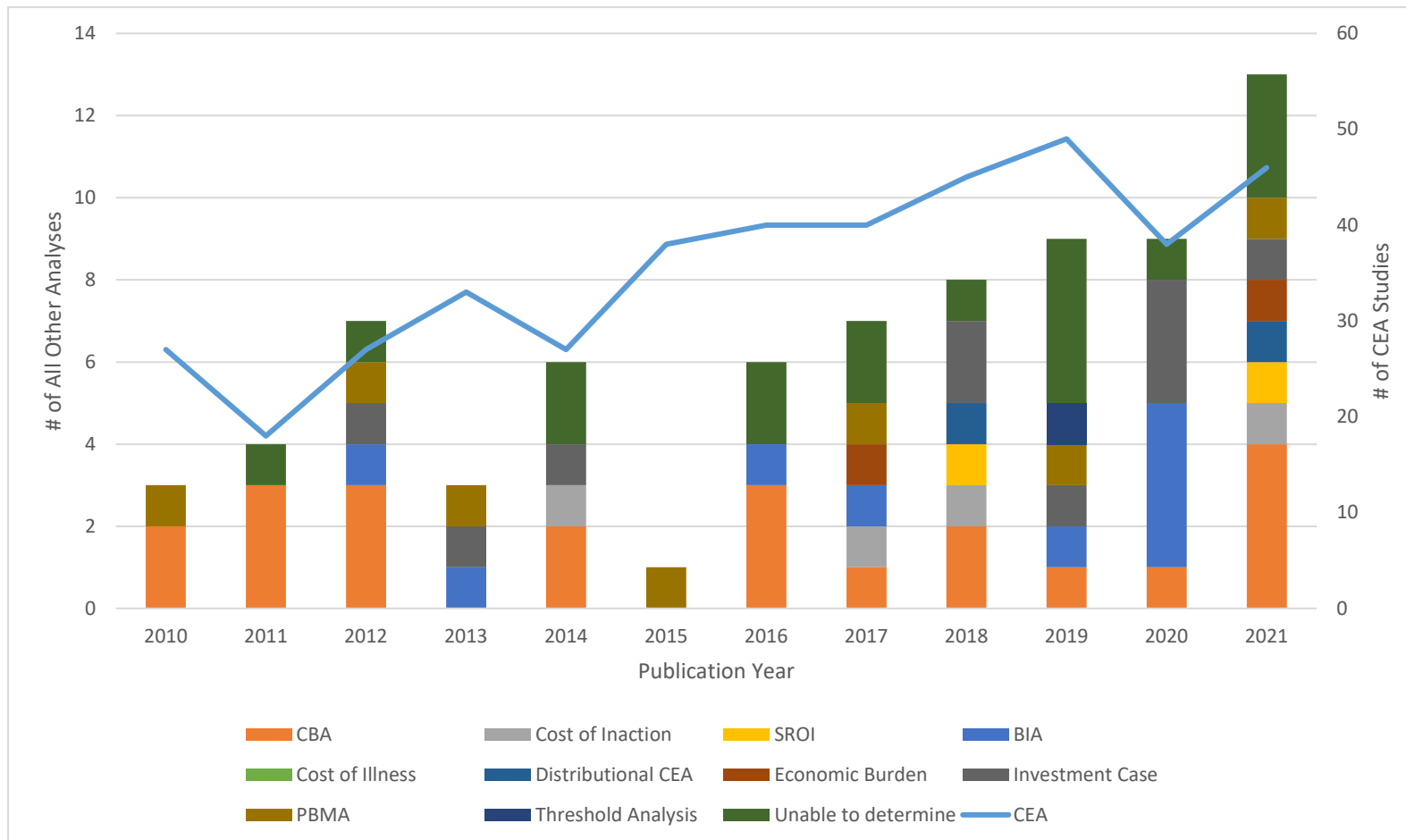
Figure 11. Publication Year by Population



*studies could be included in more than one population

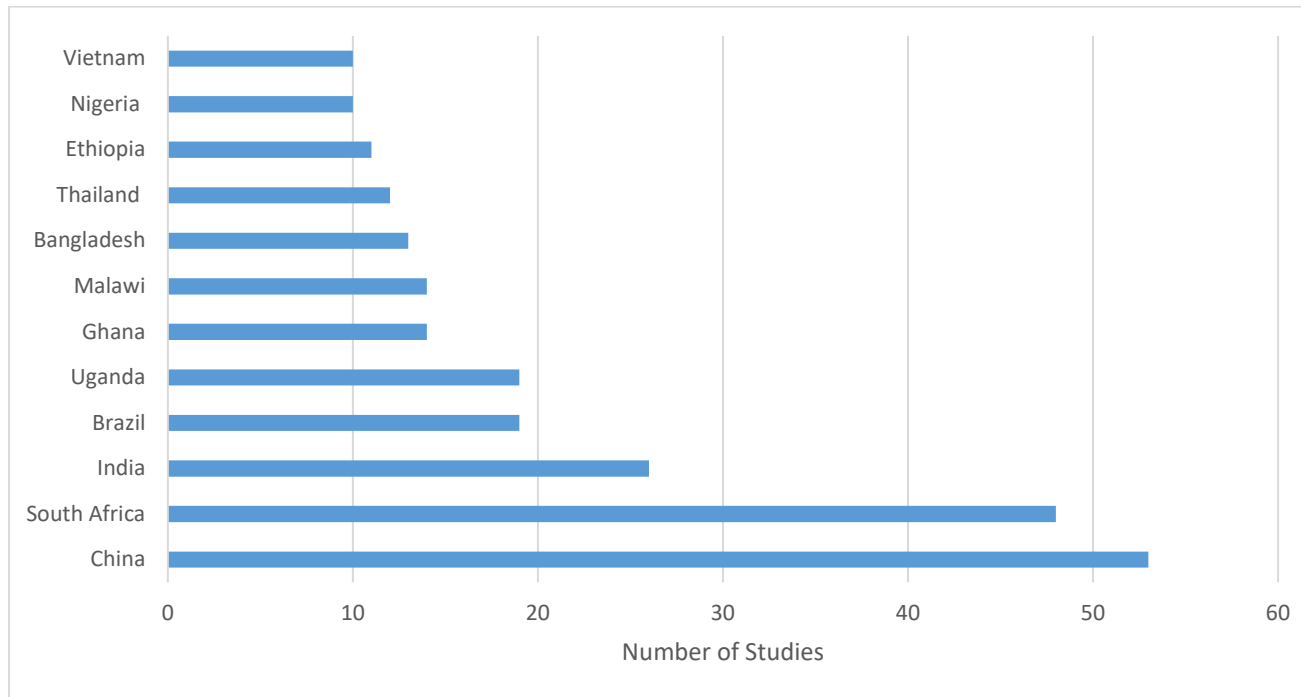
Note: the number of included studies grew steadily from 2010 onwards until a decline in 2020, likely related to the COVID-19 pandemic. There was then a sharp uptake in 2021; in January 2021 alone, there were more included publications than in any previous year, highlighting the importance of interventions for WCAH following the global COVID-19 pandemic.

Figure 12. Type of Analysis by Year of Publication



Abbreviations: BIA = budget impact analysis; CBA = cost-benefit analysis; CEA = cost-effectiveness analysis; PBMA = programme budgeting and marginal analysis; SROI = social return on investment analysis

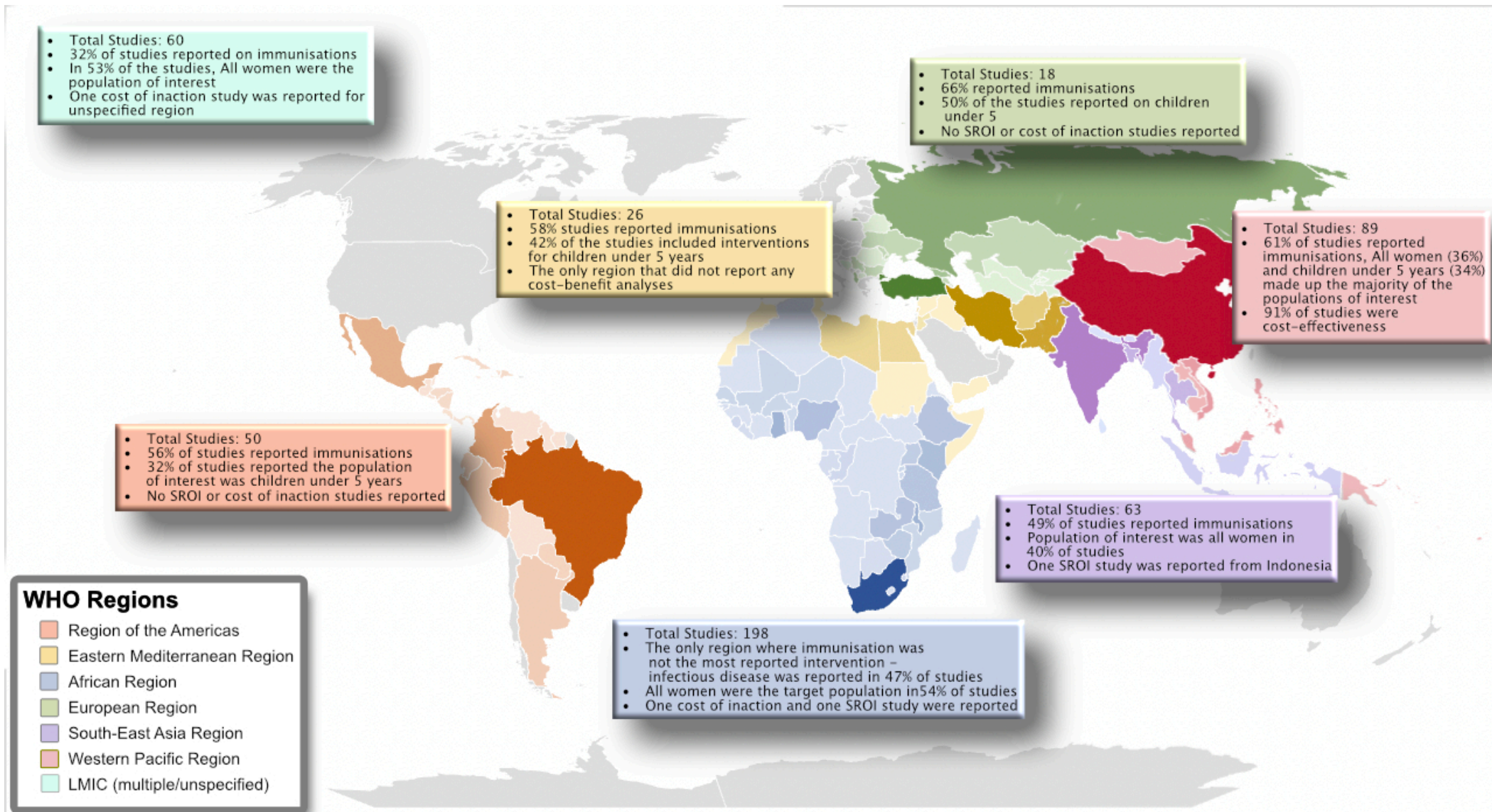
Figure 13. List of Countries with >10 Studies



*studies with multiple countries are not included in this figure

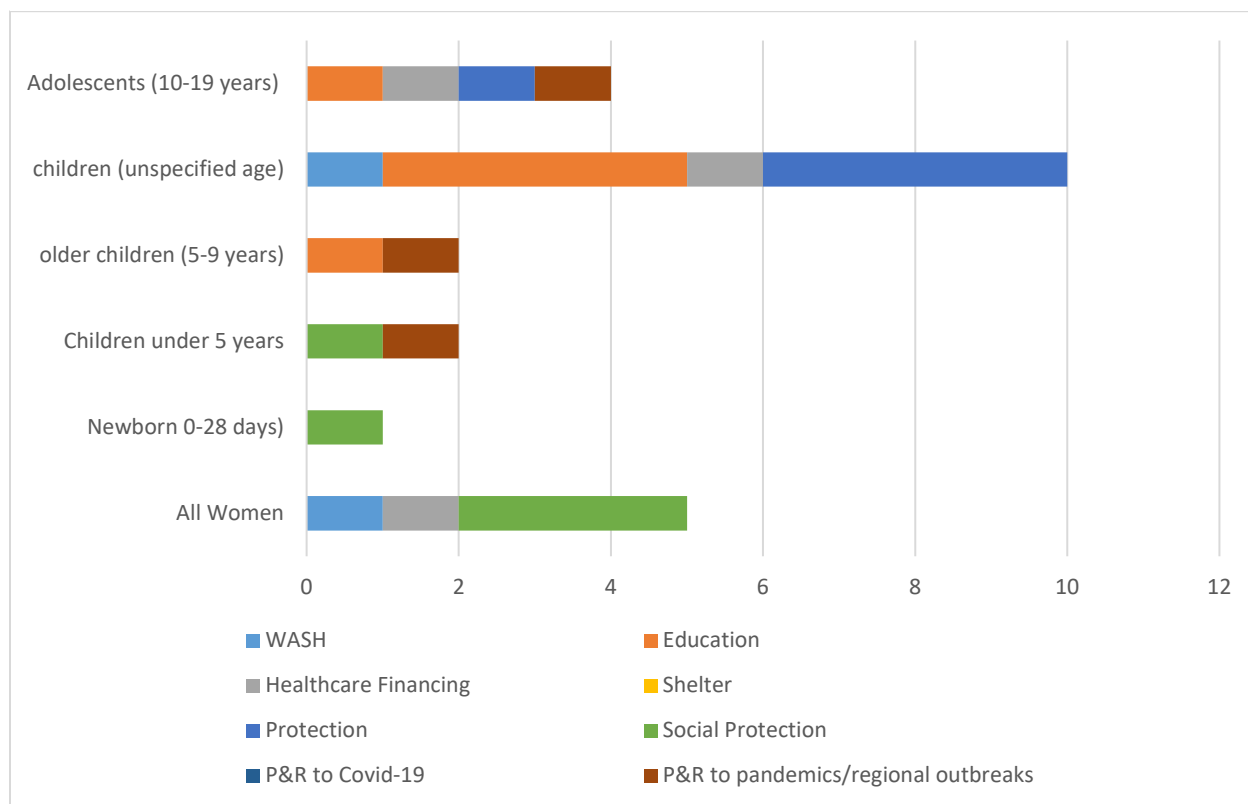
Note: this figure shows that China (n=53) and South Africa (n=48) account for one-quarter of all included studies. Many of these studies are on interventions targeting infectious diseases, such as HIV, and immunizations for HPV, measles, and pneumococcal disease.

Figure 14. Highlights of Included Studies across WHO Regions



Note: this map is used to indicate the number of included peer-reviewed studies for each WHO region, with darker colours indicating more saturation across each region; the majority of the studies stemmed from the African Region, followed by Western Pacific Region; 60 studies included multiple or unspecified LMICs and were not included in the graphical representation above.

Figure 15. Type of Multi-sectoral Approaches or Preparedness and Response Studies (n=16)

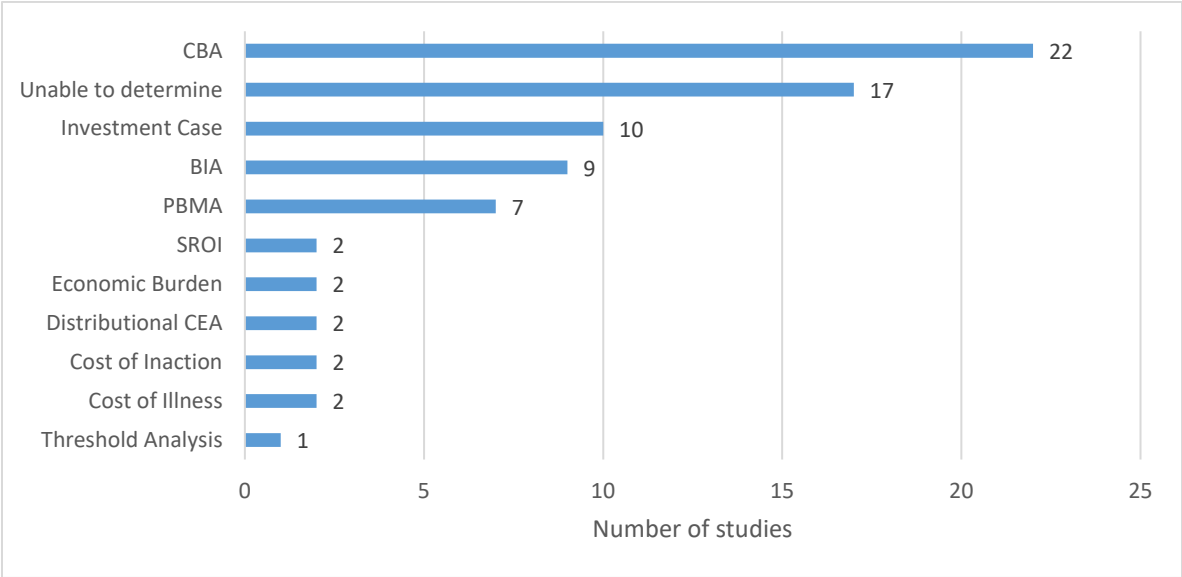


Abbreviations: P&R = preparedness and response; WASH = water, sanitation, and hygiene

Note: Limited by reviewing abstracts only, 16 studies were identified that assessed multi-sectoral approaches, or preparedness and response strategies. The highest reported multi-sectoral approaches included education (n=6), and protection and social protection (n=5).

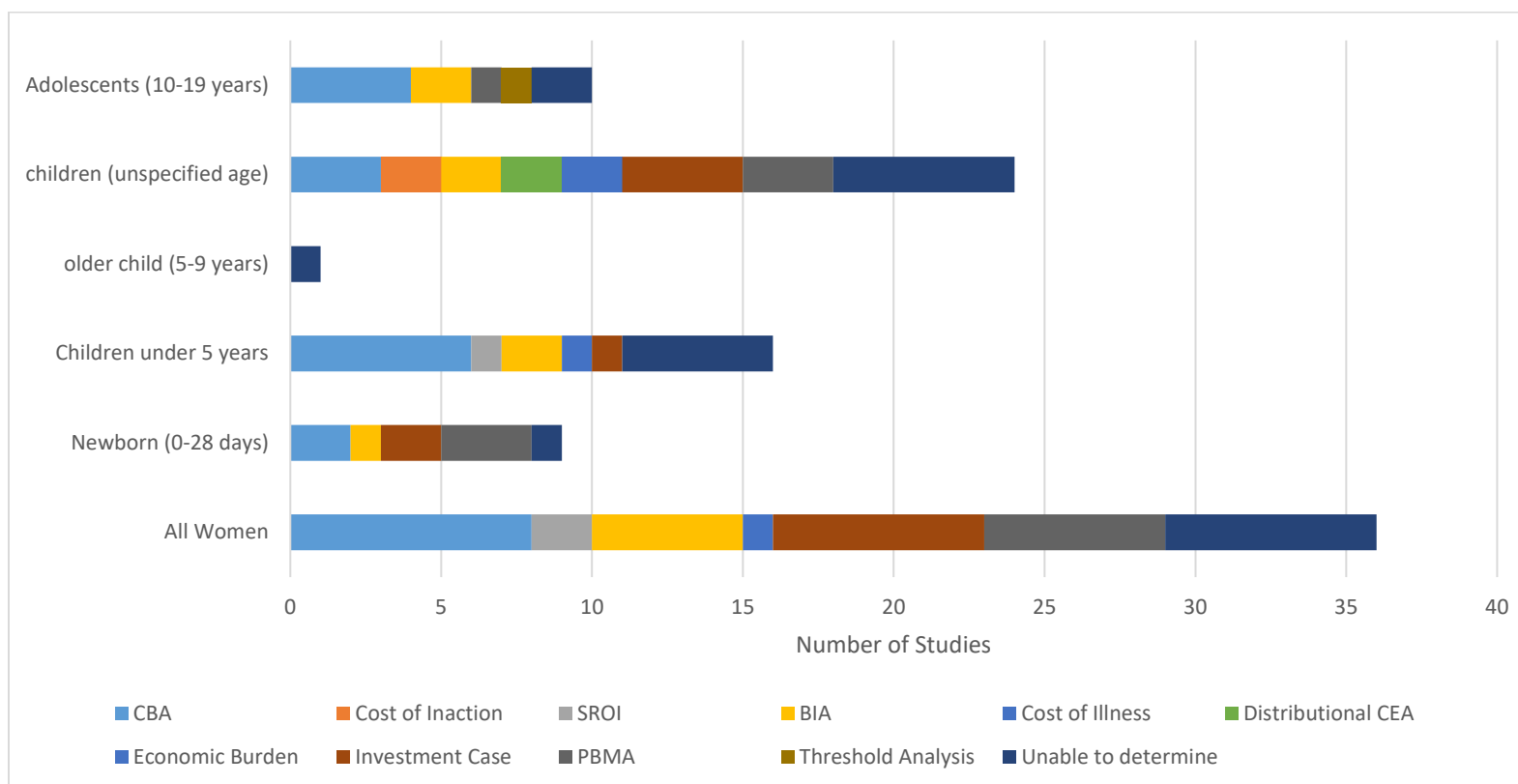
2. Peer-Reviewed Literature Excluding Cost-Effectiveness Studies

Figure 16. Number of Studies by Type of Analysis, not including Cost-Effectiveness studies (n=76)



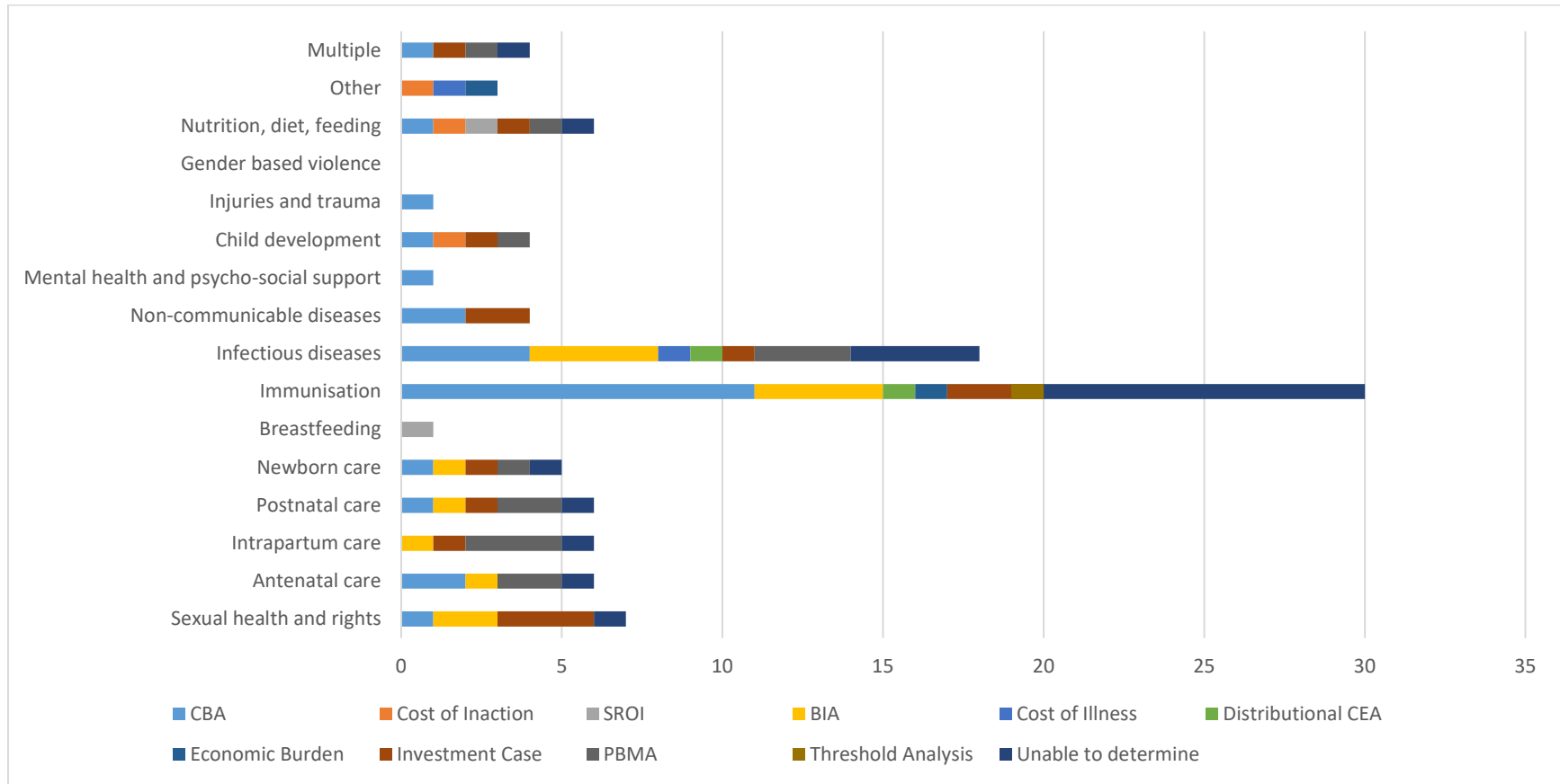
Abbreviations: BIA = budget impact analysis; CBA = cost-benefit analysis; CEA = cost-effectiveness analysis; PBMA = programme budgeting and marginal analysis; SROI = social return on investment analysis

Figure 17. Type of Analysis by Population, not including Cost-Effectiveness Studies (n=76)



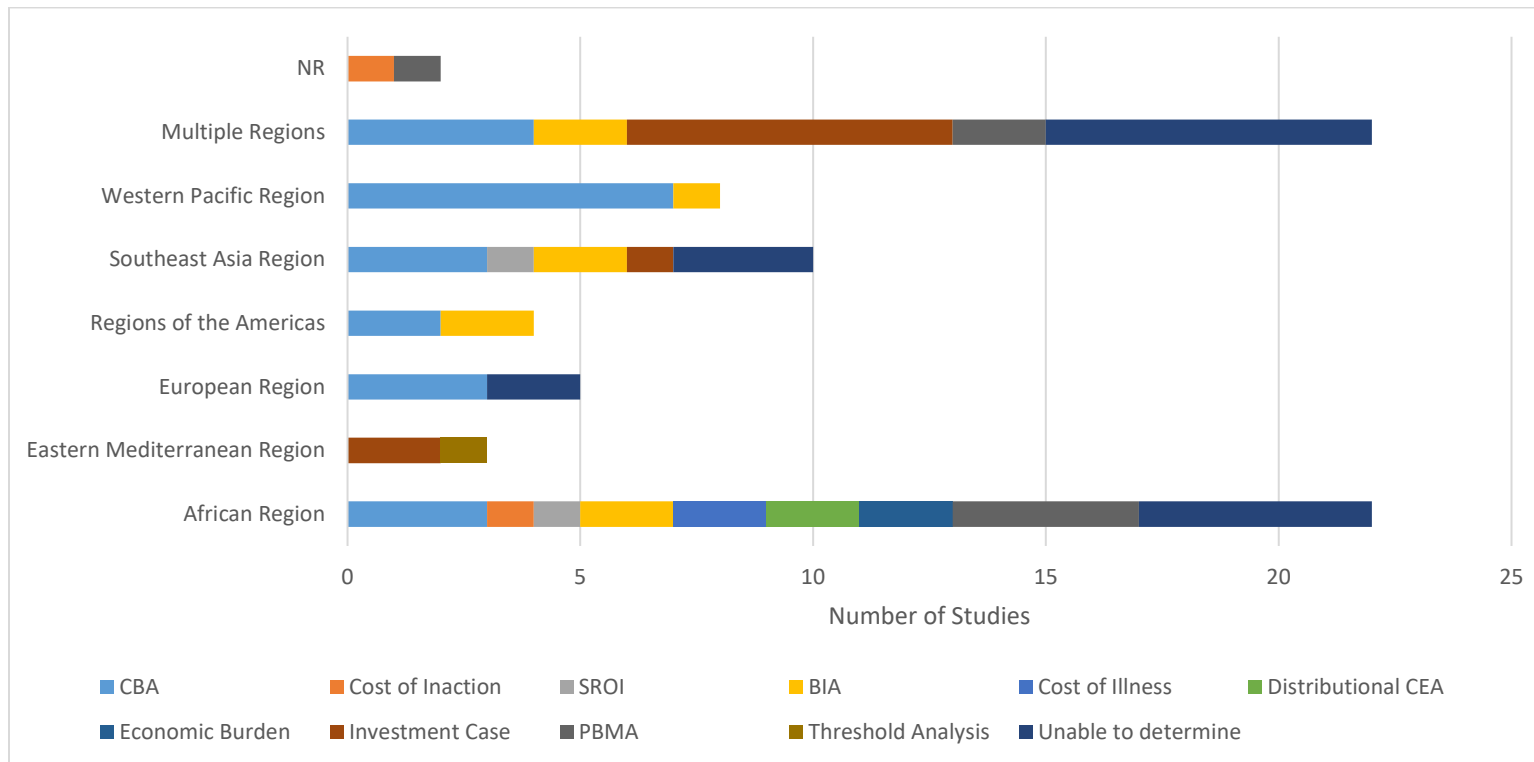
Abbreviations: BIA = budget impact analysis; CBA = cost-benefit analysis; CEA = cost-effectiveness analysis; PBMA = programme budgeting and marginal analysis; SROI = social return on investment analysis

Figure 18. Type of Analysis by Intervention, not including Cost-Effectiveness Studies (n=76)



Abbreviations: BIA = budget impact analysis; CBA = cost-benefit analysis; CEA = cost-effectiveness analysis; PBMA = programme budgeting and marginal analysis; SROI = social return on investment analysis

Figure 19. Type of Analysis by WHO Region, not including Cost-Effectiveness Studies (n=76)



Abbreviations: BIA = budget impact analysis; CBA = cost-benefit analysis; CEA = cost-effectiveness analysis; PBMA = programme budgeting and marginal analysis; SROI = social return on investment analysis

Table 2. References of Studies, not Including Cost-Effectiveness Studies

Budget Impact Analysis
(Schmidt et al. 2012) (Kennedy et al. 2013) (Mori, Norheim, and Robberstad 2016) (Doshi et al. 2017) (Pretorius et al. 2020) (Setiawan et al. 2020) (Lince-Deroche et al. 2020) (Ruiz et al. 2020) (Saokaew et al. 2019)
Cost-Benefit Analysis
(Isah et al. 2021) (Walensky et al. 2016) (Haacker, Fraser-Hurt, and Gorgens 2016) (Kostinov and Zverev 2012b) (Kostinov and Zverev 2012c) (Nizalova and Vyshnya 2010) (Sheehan et al. 2017) (Ozawa S 2011) (Sweeny et al. 2019) (Watts et al. 2021) (Cavassini et al. 2012) (Lopez Boo, Palloni, and Urzua 2014) (Singh 2014) (Muangchana and Warinsatian 2011) (Nandoskar et al. 2020) (Hong et al. 2010) (Yang, Li, and He 2016) (Zheng et al. 2021) (Sun, Zhang, and Xia 2018) (Huo et al. 2018) (Le et al. 2021) (Poulos et al. 2011)
Cost of Illness
(Kirigia et al. 2014) (Niyibitegeka et al. 2021)
Cost of Inaction
(Hsiao et al. 2018) (Richter et al. 2017)
Distributional Cost-Effectiveness Analysis
(Dawkins et al. 2018) (Olsen, Norheim, and Memirie 2021)
Economic Burden
(Kobayashi et al. 2021)

(Fang et al. 2017)
Investment Cases
(Stenberg et al. 2014) (Megiddo, Klein, and Laxminarayan 2018) (Skrundevskiy et al. 2018) (Galasso and Wagstaff 2019) (Atun et al. 2020) (Laing et al. 2020) (Lince-Deroche et al. 2020) (Wazir, Alazar, and Kadirov 2021) (Byrne et al. 2012) (Jimenez Soto et al. 2013)
PBMA
(Prata et al. 2010) (Carrera et al. 2012) (Johansson et al. 2019) (Stenberg et al. 2021) (Long and Stavert 2013) (Chiu et al. 2017) (Chola et al. 2015)
Unable to Determine
(Bojang et al. 2011) (Panovska-Griffiths et al. 2014) (Nayagam et al. 2016) (Kolesar and Audibert 2017) (Ozawa et al. 2017) (Burger et al. 2018) (Barnhart et al. 2019) (Chen et al. 2019) (Constenla and Liu 2019) (Healey et al. 2019) (Heckert et al. 2020) (Ghia et al. 2021) (Owusu, Sarkodie, and Pedersen 2021) (Portnoy et al. 2021) (Kelly et al. 2016) (Kostinov and Zverev 2012a) (Mirelman, Ozawa, and Grewal 2014)
Social Return on Investment
(Goudet et al. 2018) (Pramono et al. 2021)
Threshold Analysis
(Bahr et al. 2019)

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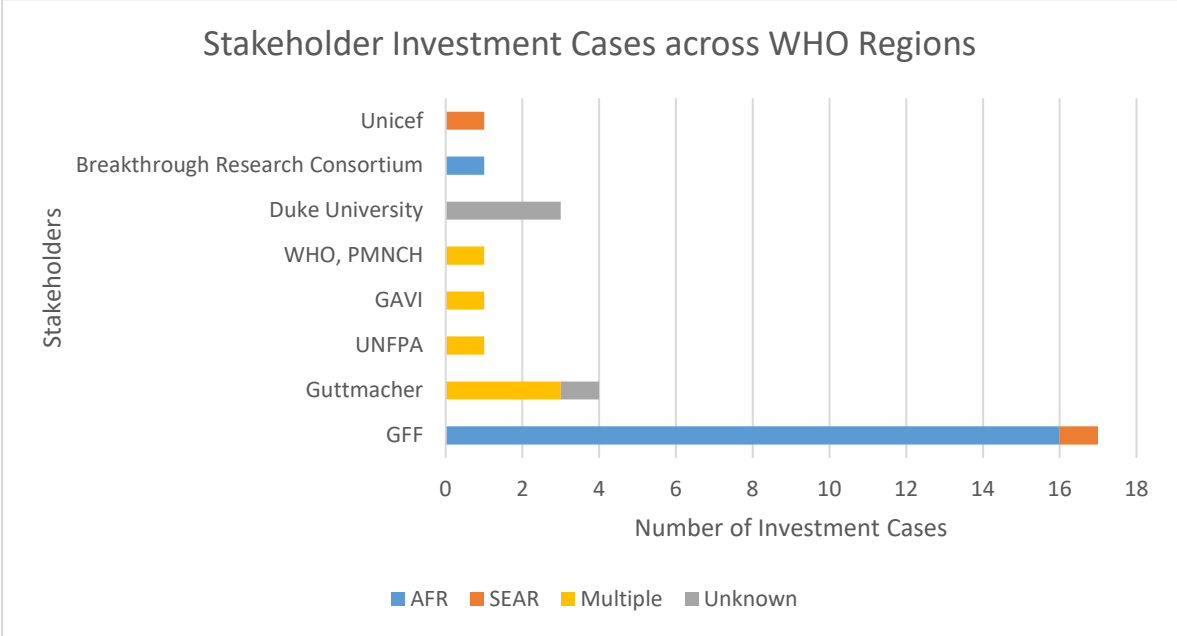
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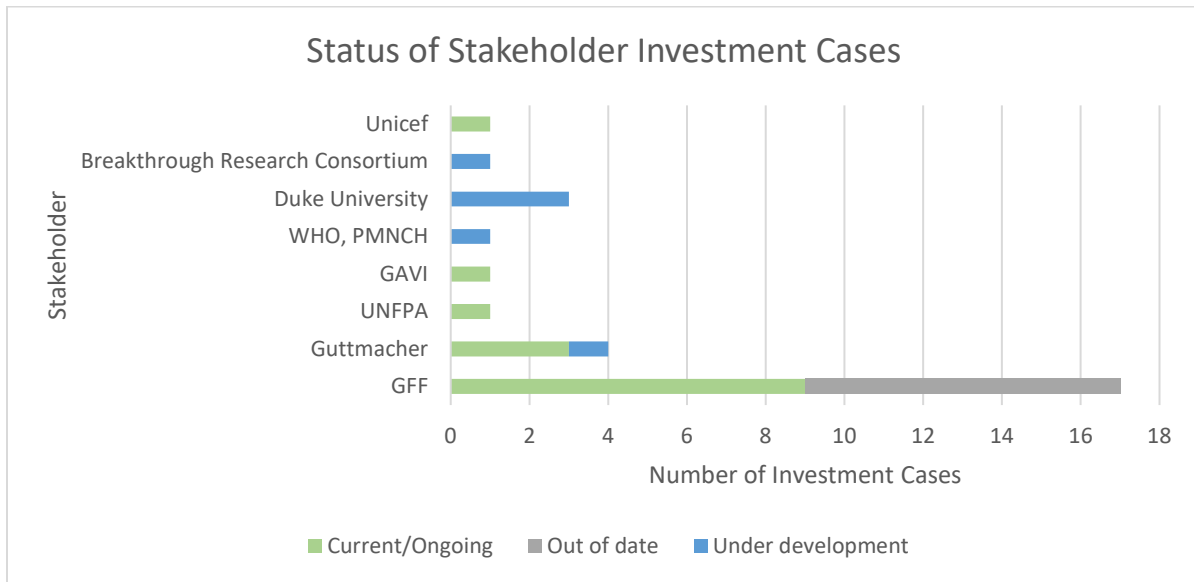
3. Grey Literature

Figure 20. Number of Stakeholder Investment Cases by WHO Region



Note: this figure is used to highlight that the bulk of the cases identified were from GFF and were predominantly in the African Region; investment cases were included from 8 stakeholders in total, more detail on the investment cases is reported below in table 3.

Figure 21. Status of Stakeholder Investment Cases



Note: this figure is used to highlight that although the bulk of the identified cases were from GFF, about half of them are out of date; Duke University was the stakeholder with the most new cases under development, followed by WHO, Guttmacher, and BR (all had 1 case in development); investment cases were included from 8 stakeholders in total, more detail on the investment cases is reported below in table 3.

Table 3. Overview of Stakeholder Investment Cases

Author	WHO Region	Country	Year of publication	Population	Intervention	Type of Analysis	Time Period of Forecast	Intervention Status
Breakthrough Research Consortium	African Region	Nigeria	Unknown	women, mothers, newborns, infants, children	Immunization, infectious disease, nutrition, antenatal, delivery, prenatal care; child health, family planning, non-communicable disease	Cost-effectiveness	Unknown	Under development
Duke University	Unknown	Unknown	Unknown	Unknown	Malaria immunizations	Unknown	Unknown	Under development
	Unknown	Unknown	Unknown	newborns, infants, children	Childhood immunizations	Unknown	Unknown	Under development
	Unknown	Unknown	Unknown	mothers, newborns	Antenatal care, skilled birth attendance, and postnatal care	Unknown	Unknown	Under development
GAVI	All	Multiple: 71 countries	2019	newborns, infants, children, and adolescent girls	Comprehensive package of life-saving vaccines coverage (pneumococcal vaccine, rotavirus vaccine, pentavalent vaccine, inactivated polio vaccine, measles and rubella, HPV, Typhoid, yellow fever, Meningitis A, Japanese encephalitis, Ebola, Cholera, VIS vaccines, CEPI outbreak vaccines).	Budget impact analysis	2021-2025	Current/ongoing
GFF	South-East Asia Region	Bangladesh	2016	women, mothers, newborns, infants, children, adolescents	Upgrade UH&FWCs to provide 24/7 normal delivery and primary care for sick newborns; endorse National Adolescent health strategy and implement action plan; endorse Maternal Health Strategy, prioritise facility delivery, PNC and PFP; implement BENAP (including new interventions); implementation of national midwifery strategy, and increased facility delivery; continuation and expansion of safety net programmes (e.g. DSF)	Other (investment case)	2016-2021	Out of date
	African Region	Burkina Faso	2019	women, mothers, newborns, infants, children, adolescents	Maternal and newborn health, child health, adolescent and youth health, nutrition, immunization, community health and cross-cutting interventions, civil situation	Other (investment case)	2019-2023	Current/ongoing
	African Region	Central African Republic	2020	women, mothers, newborns, infants, children, adolescents	Maternal, newborn and reproductive health; family planning; child, adolescent and youth health; immunization; nutrition, WASH; RMNCAH-N; health system strengthening	Other (investment case)	2020-2022	Current/ongoing
	African Region	Democratic Republic of Congo	2019	women, mothers, newborns, infants, children, adolescents	RMNCAH; human resource development; medications; control of HIV/AIDS, TB and malaria, priority non-communicable diseases, and diseases and financial protection for households	Other (investment case)	2019-2022	Current/ongoing
	African Region	Ethiopia	2015	women, mothers, newborns, infants, children, adolescents	Package of strategies for reproductive, maternal, neonatal, child, adolescent and youth health	Other (investment case)	2015/16-2019/20	Out of date
	African Region	Nigeria	2017	women, mothers, newborns, infants, children, adolescents	Immunization, infectious disease, nutrition, antenatal, delivery, prenatal care; child health, family planning, non-communicable disease	Other (investment case)	2017-2030	Current/ongoing

Author	WHO Region	Country	Year of publication	Population	Intervention	Type of Analysis	Time Period of Forecast	Intervention Status
	African Region	Kenya	2016	women, mothers, newborns, infants, children, adolescents	Interventions targeted at improving maternal and newborn health, child health, adolescent and youth health, family planning, immunization, and nutrition	Other (investment case)	2015-2020	Out of date
	African Region	Mozambique	2017	women, mothers, newborns, infants, children, adolescents	Investments in equity and expansion of coverage, reduction of barriers in supply and demand (access, use, coverage), strengthening of the health system	Other (investment case)	2017-2022	Current/ongoing
	African Region	Republic of Cameroon	2017	women, mothers, newborns, infants, children, adolescents	Immunization, family planning, prenatal care, skilled attendance at delivery, postnatal care, essential and emergency obstetric and neonatal care, integrated management of childhood illness, retention of girls in school, etc	Other (investment case)	2017-2020	Out of date
	African Region	Republic of Ivory Coast	2020	women, mothers, newborns, infants, children, adolescents	Environment (access to clean water, hygiene and sanitation); newborn, infant and child health (essential newborn care, nutrition, immunization, and integrated management of neonatal and childhood illness); maternal, newborn, and reproductive health (family planning, prenatal care assisted deliveries and emergency obstetric and neonatal care)	Other (investment case)	2020-2023	Current/ongoing
	African Region	Republic of Guinea	2017	women, mothers, newborns, infants, children, adolescents	Immunization, vitamin A supplementation, integrated management of childhood diseases, assisted delivery, maternal emergency management, newborn care, water, sanitation and hygiene (WASH), family planning, prenatal care, postnatal care, prevention of mother-to-child transmission, malnutrition prevention, malaria prevention and civil registration	Other (investment case)	2017-2021	Out of date
	African Region	Liberia	2016	women, mothers, newborns, infants, children, adolescents	Community based interventions, Facility Based and Outreach services, services for adolescents and youth, Child survival and development (WASH)	Other (investment case)	2016-2020	Out of date
	African Region	Republic of Mali	2019	women, mothers, newborns, infants, children, adolescents	The implementation of the essential services package of the RMNCAH-N, including (i) maternal, neonatal and child health services and services for survivors of gender-based violence, (ii) nutrition services, (iii) reproductive health services for adolescents and young people, and (iv) interventions related to water, hygiene and sanitation (WASH)	Other (investment case)	2019-2023	Current/ongoing
	African Region	Republic of Senegal	2019	women, mothers, newborns, infants, children, adolescents	Integrated package of high-impact RMNCAH interventions (including nutrition, maternal health, neonatal health, adolescent and youth reproductive health); other priorities include Improving equity and demand for RMNCAH services, services for vulnerable people, improving adolescent/youth health through multisectorality, strengthening the pillars of RMNCAH provision, and strengthening the governance of the health system and civil situation	Other (investment case)	2018-2022	Current/ongoing
	African Region	Sierra Leone	2017	women, mothers, newborns, infants, children, adolescents	Family planning; Antenatal Care for positive experience in pregnancy; emergency obstetric and neonatal care including skilled birth attendance and essential newborn care; integrated management of newborn and childhood infections (IMCI) and integrated community case management of childhood illnesses (ICCM); immunization; nutrition; prevention of teenage pregnancy; and water, hygiene and sanitation (WASH)	Other (investment case)	2017-2021	Out of date
	African Region	Uganda	2016	women, mothers, newborns, infants, children, adolescents	Integrated Community Case Management (ICCM), immunization, Misoprostol, pregnancy testing, counselling and birth preparedness, focused ANC (HIV Testing, IPT, FP, LLIN distribution, Iron/Folate) and PNC; Referral for delivery/PAC/FP/adolescent care, follow up HIV exposed babies, linkages for	Other (investment case)	2016/17-2019/20	Out of date

Author	WHO Region	Country	Year of publication	Population	Intervention	Type of Analysis	Time Period of Forecast	Intervention Status
					adolescent/SGBV/HIV to BCC, sexuality and life skills education, socio-support, BDR, home visits for interpersonal communication on improving household and community RMNCAH practices (including household sanitation and hygiene), compliance support and tracking defaulters, counselling and birth preparedness, demand creation for family planning, adolescent responsive services at facility, school and community level; Family planning (steady reliable supply of quality modern contraceptives, etc); adolescent friendly package of health services; Integrated Management of Neonatal and Childhood Illnesses (IMNCI); Nutrition; Immunization			
	African Region	Tanzania	2021	women, mothers, newborns, infants, children, adolescents	Immunization, Sexual health and rights, infectious disease, nutrition, intrapartum, breastfeeding, child development, antenatal, delivery, prenatal care, child health, family planning, non-communicable disease. Key interventions according to the plan: Strengthening health systems (primary and referral), equipping district, regional and referral hospitals with modern equipment, training health staff	Other (investment case)	2021/2022-2025/2026	Current/ongoing
Guttmacher Institute	All	Multiple LMICs	2021	women of reproductive age, couples	Family planning, comprehensive abortion care, maternal and newborn health care, ending child marriage and gender-based violence, and integrate family planning with sexual and reproductive health services for marginalized and hard-to-reach populations	Other (investment case)	2021-2022	Current/ongoing
	All	Multiple LMICs	2021	women of reproductive age, couples	Family planning information, services and supplies, reproductive health programs, ending child marriage and gender-based violence, integrating family planning with maternal and child health interventions and HIV programming	Other (investment case)	2021-2022	Current/ongoing
	Unknown	Unknown	2022	women of reproductive age	Impact of fertility regulation (contraceptive use and abortion) on women's empowerment and socio-economic development	Unknown	Unknown	Under development
	All	Multiple	2019	women, mothers, newborns, infants, children, adolescents	Core services that women need and use during their reproductive years: contraceptive services, pregnancy-related care (including maternal health care and abortion services), newborn care and treatment for STIs	Other (investment case)	2003 - present (ongoing)	Current/ongoing
UNICEF	South-East Asia Region	Afghanistan, Bangladesh, Bhutan, India, Nepal, Pakistan	2021	mothers, newborns	Antenatal care; intrapartum care; postnatal care; newborn care: (e.g. folic acid supplementation; tetanus vaccination; micronutrient supplementation in pregnancy; skilled birth attendance; health facility delivery; clean birth practices; L&D management; neonatal resus; active management of 3rd stage of labour; exclusive breastfeeding; etc)	Other (investment case)	2021-2030	Current/ongoing
United Nations Population Fund	All	Multiple: 120 countries	2020	women, mothers, adolescent girls	Preventable maternal deaths (e.g., folic acid supplementation, safe abortion services); Family planning (steady reliable supply of quality modern contraceptives, etc); Ending female genital mutilation (supporting agency of girls and women; community empowerment prevention programmes); legislation and policy development; laws and enforcement; capacity building; psychosocial support; etc; Ending gender-based violence	Costing study	2020-2030	Current/ongoing

Author	WHO Region	Country	Year of publication	Population	Intervention	Type of Analysis	Time Period of Forecast	Intervention Status
WHO, PMNCH	All	Multiple: all LMICs, case studies on Kenya, Mexico, and India	2023	adolescents	Multisectoral; (i) OneHealth tool (OHT) capability: train one person with capability to handle OHT and to run the tool for up to 100 LMICs; (ii) Full revision and update of the education model, and running the model for many countries; (iii) Update and expansion of the education model, including fuller treatment of skills issues; (iv) Review and formalization of economic and social benefits model, including the extension to variables such as reduced poverty and financial risk in the benefits; (v) Application of road accidents model to this project and to required country coverage; (vi) Further development and application of CM model to relevant countries; (vii) Investigation of options for improved modelling of interpersonal violence and mental health issues for adolescents; (viii) Thorough review and update of all estimates of the cost of the interventions; and (ix) Operation of the models above in an integrated fashion for the target countries.	Other (cost and benefit analysis, return on investment analysis)	Unknown	Under development

Note: this table is a summary of the information extracted from the stakeholder investment cases and expands on the data presented in the figures above; a total of 29 cases either existing or in development were included; most investment cases were from GFF and fell into the category of “package” interventions for SRMNCAH – these generally included various combinations of immunizations, reproductive health interventions, nutrition, etc; 3 cases were on immunization only, and 3 were on sexual and reproductive health only; otherwise, the investment cases generally included a variety of interventions. With respect to type of analysis, the majority were classified as “other”.