

**Supplementary material 1: Full search strategy**

**Search strategy for PubMed (1 July 2018)**

[Mesh] = Medical subject headings (MeSH)

[tiab] = words in title or abstract

Search	Query	Items found
#5	(#3 AND #4)	839
#4	((("Medical Missions, Official"[MeSH] OR "Missionaries"[Mesh] OR "Mobile Health Units"[Mesh] OR "International Cooperation"[Mesh:NoExp] OR "Relief Work"[Mesh:NoExp] OR "Voluntary Health Agencies"[Mesh] OR mobile health unit*[tiab] OR mobile clinic*[tiab] OR field hospital*[tiab] OR medical mission*[tiab] OR mobile hospital*[tiab] OR relief work*[tiab] OR humanitarian[tiab] OR surgical mission*[tiab] OR missionar*[tiab] OR global surger*[tiab] OR medical service trip*[tiab] OR stmm*[tiab] OR non-governmental organi*[tiab] OR ngo[tiab] OR ngos[tiab] OR charit*[tiab]))	73,660
#3	(#1 OR #2)	406,391
#2	((reconstructi*[tiab] OR cosmetic*[tiab] OR esthetic*[tiab] OR aesthetic*[tiab] OR plastic[tiab] OR corrective*[tiab] OR "Cleft Lip"[MeSH] OR "Burns"[MeSH] OR "Cleft Palate"[Mesh] OR "Noma"[MeSH] OR "Craniofacial Abnormalities"[Mesh] OR burn[tiab] OR burns[tiab] OR scald*[tiab] OR postburn*[tiab] OR (thermal[tiab] AND injur*[tiab]) OR harelip*[tiab] OR palate*[tiab] OR palatum[tiab] OR cleft*[tiab] OR palatoschisis[tiab] OR palatoschizis[tiab] OR contracture*[tiab] OR (stomatiti*[tiab] AND gangrenous*[tiab]) OR cancrum oris[tiab] OR noma[tiab] OR nomas[tiab] OR craniofacial*[tiab]) AND ("surgery" [Subheading] OR "Surgical Procedures, Operative"[Mesh] OR "Surgeons"[Mesh] OR "Perioperative Period"[Mesh] OR "Perioperative Care"[Mesh] OR surger*[tiab] OR surgical*[tiab] OR surgeon*[tiab] OR operation*[tiab] OR operative*[tiab] OR perioperati*[tiab] OR incisi*[tiab] OR extracti*[tiab] OR excisi*[tiab]))	262,276
#1	"Surgery, Plastic"[MeSH] OR "Reconstructive Surgical Procedures"[Mesh] OR "Skin Transplantation"[Mesh] OR "Surgical Flaps"[Mesh] OR skin graft*[tiab] OR ssg[tiab] OR ftg[tiab] OR full thickness graft*[tiab] OR axial flap*[tiab] OR pedicle flap*[tiab] OR pedicled flap*[tiab] OR surgical flap*[tiab] OR contracture release*[tiab]	233,098

**Search strategy for Embase.com (1 July 2018)**

/exp = EMtree keyword with explosion

/de = EMtree keyword without explosion

:ab,ti = words in title or abstract

NEAR/x = words near to each other, x places apart

Search	Query	Items found
#9	#7 AND #8	746
#8	#1 OR #6	468,987
#7	'international cooperation'/de OR 'relief work'/exp OR 'voluntary worker'/exp OR 'mobile health unit*':ab,ti OR 'mobile clinic*':ab,ti OR 'field hospital*':ab,ti OR 'medical mission*':ab,ti OR 'mobile hospital*':ab,ti OR 'relief work*':ab,ti OR humanitarian:ab,ti OR 'surgical mission*':ab,ti OR missionar*:ab,ti OR 'global surger*':ab,ti OR 'medical service trip*':ab,ti OR stmm*:ab,ti OR 'non-governmental organi*':ab,ti OR ngo:ab,ti OR ngos:ab,ti OR charit*:ab,ti	78,107
#6	#4 AND #5	323,136
#5	'surgery'/exp OR 'surgeon'/exp OR surger*:ab,ti OR surgical*:ab,ti OR surgeon*:ab,ti OR operation*:ab,ti OR operative*:ab,ti OR perioperati*:ab,ti OR incisi*:ab,ti OR extracti*:ab,ti OR excisi*:ab,ti	5,524,411

<b>#4</b>	reconstructi*:ab,ti OR cosmetic*:ab,ti OR esthetic*:ab,ti OR aesthetic*:ab,ti OR plastic:ab,ti OR corrective*:ab,ti OR 'lip malformation'/exp OR 'burn'/exp OR 'cleft palate'/exp OR 'craniofacial malformation'/exp OR burn:ab,ti OR burns:ab,ti OR scald*:ab,ti OR postburn*:ab,ti OR (thermal NEAR/3 injur*):ab,ti OR harelip*:ab,ti OR palate*:ab,ti OR palatum:ab,ti OR cleft*:ab,ti OR palatoschisis:ab,ti OR palatoschizis:ab,ti OR contracture*:ab,ti OR (stomatiti*:ab,ti OR 'stomatitis'/de AND gangrenous*:ab,ti) OR 'cancrum oris':ab,ti OR noma:ab,ti OR nomas:ab,ti OR craniofacial*:ab,ti	<b>624,075</b>
<b>#1</b>	'plastic surgery'/de OR 'plastic surgeon'/exp OR 'esthetic surgery'/exp OR 'skin transplantation'/exp OR 'tissue flap'/exp OR 'z plasty'/exp OR 'surgical flaps'/exp OR 'tendon reconstruction'/exp OR 'reconstructive surgery'/exp OR 'skin graft*':ab,ti OR ssg:ab,ti OR ftg:ab,ti OR 'full thickness graft*':ab,ti OR 'axial flap*':ab,ti OR 'pedicle flap*':ab,ti OR 'pedicled flap*':ab,ti OR 'surgical flap*':ab,ti OR 'contracture release*':ab,ti	<b>167,334</b>

**Search strategy for Clarivate Analytics/Web of Science (1 July 2018)**

TOPIC = words in title, abstract or keywords

NEAR/x = words near to each other, x places apart

Indexes=SCI-EXPANDED, SSCI, A&HCI, ESCI; Timespan=All years

Search	Query	Items found
<b>#7</b>	#6 AND #4	<b>370</b>
<b>#6</b>	#5 OR #1	<b>187,476</b>
<b>#5</b>	#3 AND #2	<b>175,791</b>
<b>#4</b>	TOPIC: ("mobile health unit*" OR "mobile clinic*" OR "field hospital*" OR "medical mission*" OR "mobile hospital*" OR "relief work*" OR humanitarian OR "surgical mission*" OR missionar* OR "global surger*" OR "medical service trip*" OR stmm* OR "non-governmental organi*" OR ngo OR ngos OR charit*)	<b>42,472</b>
<b>#3</b>	TOPIC: (surger* OR surgical* OR surgeon* OR operation* OR operative* OR perioperati* OR incisi* OR extracti* OR excisi*)	<b>2,740,911</b>
<b>#2</b>	TOPIC: (reconstructi* OR cosmetic* OR esthetic* OR aesthetic* OR plastic OR corrective* OR burn OR burns OR scald* OR postburn* OR (thermal NEAR/3 injur*) OR harelip* OR palate* OR palatum OR cleft* OR palatoschisis OR palatoschizis OR contracture* OR (stomatiti* NEAR/3 gangrenous*) OR "cancrum oris" OR noma OR nomas OR craniofacial*)	<b>913,916</b>
<b>#1</b>	TOPIC: ("skin graft*" OR ssg OR ftg OR "full thickness graft*" OR "axial flap*" OR "pedicle flap*" OR "pedicled flap*" OR "surgical flap*" OR "contracture release*")	<b>17,026</b>

**Search strategy for OpenGrey (2 February 2018)**

Search	Query	Items found
<b>#1</b>	((("mobile health unit*" OR "mobile clinic*" OR "field hospital*" OR "medical mission*" OR "mobile hospital*" OR "relief work*" OR humanitarian OR "surgical mission*" OR missionar* OR "global surger*" OR "medical service trip*" OR stmm* OR "non-governmental organi*" OR ngo OR ngos OR charit*) AND (((reconstructi* OR cosmetic* OR esthetic* OR aesthetic* OR plastic OR corrective* OR burn OR burns OR scald* OR postburn* OR (thermal NEAR/3 injur*) OR harelip* OR palate* OR palatum OR cleft* OR palatoschisis OR palatoschizis OR contracture* OR (stomatiti* NEAR/3 gangrenous*) OR "cancrum oris" OR noma OR nomas OR craniofacial*) AND (surger* OR surgical* OR surgeon* OR operation* OR operative* OR perioperati* OR incisi* OR extracti* OR excisi*)) OR ("skin graft*" OR ssg OR ftg OR "full thickness graft*" OR "axial flap*" OR "pedicle flap*" OR "pedicled flap*" OR "surgical flap*" OR "contracture release*"))))	<b>33</b>

**Search strategy for ProQuest Dissertations & Theses (1 July 2017)**

This database was no longer available to us in 2018.

ti = words in title

ab = words in abstract

Search	Query	Items found
<b>S15</b>	<p>(ti(((("mobile health" AND unit*) OR (mobile AND clinic*) OR (field AND hospital*) OR (medical AND mission*) OR (mobile AND hospital*) OR (relief AND work*) OR humanitarian OR (surgical AND mission*) OR missionar* OR (global AND surger*) OR ("medical service" AND trip*) OR stmm* OR ("non governmental" AND organi* OR ngo OR ngos OR charit*)) OR ab(((("mobile health" AND unit*) OR (mobile AND clinic*) OR (field AND hospital*) OR (medical AND mission*) OR (mobile AND hospital*) OR (relief AND work*) OR humanitarian OR (surgical AND mission*) OR missionar* OR (global AND surger*) OR ("medical service" AND trip*) OR stmm* OR ("non governmental" AND organi* OR ngo OR ngos OR charit*))) AND ((ti(((skin AND graft*) OR ssg OR ftg OR ("full thickness" AND graft*) OR (axial AND flap*) OR (pedicle* AND flap*) OR (surgical AND flap*) OR (contracture AND release*))) OR ab(((skin AND graft*) OR ssg OR ftg OR ("full thickness" AND graft*) OR (axial AND flap*) OR (pedicle* AND flap*) OR (surgical AND flap*) OR (contracture AND release*)))) OR ((ti((reconstructi* OR cosmetic* OR esthetic* OR aesthetic* OR plastic OR corrective* OR burn OR burns OR scald* OR postburn* OR (thermal AND injur*) OR harelip* OR palate* OR palatum OR cleft* OR palatoschisis OR palatoschizis OR contracture* OR (stomatiti* AND gangrenous*) OR (cancrum oris) OR noma OR nomas OR craniofacial*)) OR ab((reconstructi* OR cosmetic* OR esthetic* OR aesthetic* OR plastic OR corrective* OR burn OR burns OR scald* OR postburn* OR (thermal AND injur*) OR harelip* OR palate* OR palatum OR cleft* OR palatoschisis OR palatoschizis OR contracture* OR (stomatiti* AND gangrenous*) OR (cancrum oris) OR noma OR nomas OR craniofacial*))) AND (ti((surger* OR surgical* OR surgeon* OR operation* OR operative* OR perioperati* OR incisi* OR extracti* OR excisi*)) OR ab((surger* OR surgical* OR surgeon* OR operation* OR operative* OR perioperati* OR incisi* OR extracti* OR excisi*))))))</p>	<b>228</b>

Supplementary material 2: cleft care missions

Authors (year)	Affiliated organizations	Country of mission	Year of mission	Length of mission (days) <sup>a</sup>	Number of patients treated <sup>b</sup>	Age category of patients (years) a) median, b) mean, (range)	Sex distribution Female (F) Male (M)	Length of follow-up <sup>c, d</sup>	Follow-up rate <sup>d</sup> patients, (%)	Complication rate <sup>d</sup> patients, (%)	Health gains <sup>e</sup>
<b>Aziz et al. (2009)</b>	NA	Bangladesh	2006-2008	3-6	146	(<1-35)	NA	≤10 days	NA	8/146 (5.5%)	NA
<b>Bello et al. (2018)</b>	Cleft & Facial Deformity Foundation (CFDF)	Nigeria	2011-2017	7	448	b) 9.3 (1-70)	F 266 (48.7%) M 280 (51.3%)	2 months	155/448 (34.6%)	35/155 (34.6%)	NA
<b>Bermudez et al. (2009)</b>	Operation Smile	40 countries	2007	10	4,086	NA	NA	1 year	812/4,086 (19.9%)	NA	NA
<b>Calis et al. (2016)</b>	Interplast Turkey	Uzbekistan	2009-2014	9-10	529	NA	NA	NA	NA	1/529 (0.2%)	NA
<b>Daniels et al. (2016)</b>	ReSurge International	China	2005-2009	NA	201	a) 4.5 (2.47 – 8.02)	F 40 (41%) M 57 (59%)	1-5 years <sup>c</sup>	116/201 (57.7%)	34/96 (35.4%)* <sup>f</sup>	NA
<b>Fayyaz et al. (2015)</b>	Cleft Lip and Palate Association of Pakistan	Pakistan	2014	7	312	b) 7 (0.25 - 69)	F 125 (40%) M 187 (60%)	3 months	NA	18/312 (5.8%)	NA
<b>Guneren et al. (2015)</b>	Turkish international development agency <sup>a</sup>	Asia, Middle East, Africa	2007-2014	NA	25	b) 10 (2 - 42)	F 11 (44%) M 14 (56%)	NA	NA	NA	NA
<b>Hackenberg et al. (2015)</b>	Operation Smile	India	2006-2012	7-14	3,503	b) 11.9 ± 8.3 yr	F 1541 (44%) M 1962 (56%)	NA	NA	NA	Total 21,006 DALYs averted 6.0 DALYs averted per patient
<b>Hughes et al. (2016)</b>	Hands Across the World	Ecuador	2015	7	27	b) 11.1 ± 8.3 yr	F 12 (44%) M 15 (56%)	NA	NA	NA	

<b>Hughes et al. (2012)</b>	Hands Across the World	Ecuador	1996-2011	7-14	1,142	b) 18·9 (0·1 - 74)	F 513 (45%) M 629 (55%)	7 days	1,089/1,142 (97·1%)* <sup>n</sup>	40/1122 (3·6%)* <sup>n</sup>	Total 396 - 1042 DALY averted 3·9 – 10·2 DALY averted per patient
<b>MacIntosh et al. (2013)</b>	Healing the children	Colombia	1994-2011	6-8	2,558	(0·17 - 52)	F 1151 (45%) M 1407 (55%)	NA	NA	10/2727 (0·4%)+ <sup>g</sup>	NA
<b>Madsen et al. (2015)</b>	US military	Domenican Republic	2005-2009	14	223	NA	NA	30 months	205/223 (91·1%)	13/223 (5·8%)	Speech score improved from 11·4 (6-24) to 5 postoperatively (Borderline = 6) <sup>h</sup>
<b>Magee et al. (2010)</b>	Operation Smile	Kenya, Russia, Nicaragua, Vietnam	2008	7	303	b) 4·99	NA	NA	NA	NA	Total 3099·52 DALYs averted 10·1 DALYs averted per patient
<b>Maine et al. (2012)</b>	ReSurge int and Rostros Felices	Ecuador	2000-2005	NA	315	a) 1·75	NA	>14 days (and following missions)	128/315 (40%)	72/128 (56·3%)	NA
<b>McQueen et al. (2007)</b>	Operation Smile	Jordan, Iraq	2005	NA	71	(0·25 - 15)	F 34 (48%) M 37 (52%)	NA until discharge <sup>i</sup>	NA	4/71 (5·6%)	NA
<b>McQueen et al. (2009)</b>	Operation Smile	18 Countries	NA	NA	8,151	(0 - 20)	F 3509 (45%) M 4369 (55%)	NA	NA	67/8151 (0·8%)	NA
<b>Moon et al. (2012)</b>	Smile for Children	Vietnam	2007-2010	7-10	303	NA	NA	NA	NA	NA	Total 377 to 458 DALYs averted on average mission
<b>Navarro et al. (2015)</b>	CIRPLAST	Peru	1994-2014	7	6,108	a) 9 (0·17 - 82)	F 2932 (48%) M 3176 (52%)	12 days (range 12 days- 9 years) <sup>c</sup>	5,162/6,108 (84·5%)	377/5162 (7·3%)	NA
<b>Park et al. 2018</b>	Operation Smile	India	2010-2011	NA	890	NA	NA	7 days	662/890 (74·4%)	101/662 (15·3%)	NA
<b>Rauso et al. (2015)</b>	Emergenza Sorrisi Onlus	Uganda, Gabon	2012-2014	NA	56	b) 0·83 (0·42 - 28)	F 22 (39%) M 34 (61%)	NA until discharge <sup>i</sup>	NA	2/56 (3·6%)	NA
<b>Rivera et al. (2013)</b>	Operation Smile	Honduras	2007	7	45	b) 4 (0·25 - 17)	F 16 (36%) M 29 (64%)	6 months	22/45 (48·9%)	3/22 (13·6%)	NA

<b>Roessingh et al. (2012)</b>	SedoGoho hospital, TdH, CHUV Lausanne	Benin and Togo	1993-2008	15	131 <sup>j</sup>	NA	NA	5·6 - 7·6 years	36/71 (50·7%)* <sup>j</sup>	14/71 (19·7%)* <sup>j</sup>	Speech follow-up: 36 patients Acceptable 17/36=47·2% Unacceptable 40/71 = 52·8%
<b>Rossell-Perry et al. (2015)</b>	ReSurge International and Smile Train	Peru	2002-2012	5-7	257	(0--01-0·22)	F 148 (58%) M 109 (42%)	1-5 years <sup>c</sup>	97/353 (27·5%)* <sup>k</sup>	34/257 (13·2%)* <sup>k</sup>	NA
<b>Sharp et al. (2008)</b>	Operation Smile	Philippines	2003	NA	120	b) 7·7 (2 - 22)	F 20 (37%) M 34 (63%) <sup>m</sup>	6 months	52/99 (52·5%)* <sup>l</sup>	10/50 (20·0%)* <sup>l</sup>	Improved: <sup>l</sup> - Speech 52% - Eating 25% - Social benefits 14% - Appearance 6%
<b>Sieg et al. (2004)</b>	NA	Africa, Asia, Central America	NA	NA	14	(0·5 - 28)	NA	≥ 1 years	10/14 (71·4%)*	1/10 (10·0%)*	NA
<b>Uemura et al. (2015)</b>	Duang-Kaew Foundation	South East Asia (9 countries)	1988-2008	3-8	6,832	b) 12·8 (0·26 - 67)	F 1498 (49%) M 1622 (51%) <sup>m</sup>	1 month	5,412/6832 (79·2%) <sup>m</sup>	186/5412 (3·4%)	NA
<b>Uetani et al. (2006)</b>	Japanese Cleft Palate Foundation	Vietnam	1993-2003	10	790	NA	F 345 (44%) M 445 (56%)	NA	NA	NA	NA
<b>Wes et al. (2017)</b>	Changing Children's Lives Int·	Thailand	2013	NA	56	b) 12·14 (0·25 - 49)	F 27 (48%) M 29 (52%)	< 1·5 years	30/56 (53·6%)	0/30 (0%)	Self-reported improvement <sup>o</sup> - Social interactions 83,3% - Confidence 83·3% - School performance 75%

**Supplementary material 2. Cleft care missions. Overview of elementary data on missions, patient safety and health gains.** Notes: Data was captured as reported by authors. Figures add up in columns, may not add up between rows a. longest length of missions was used, in cases where ranges were reported; b. when available, this review reports the number of patients that receive surgery, when not available number of procedures was used. If not available, this study reports on patients with presenting diagnosis; c. when studies reported shortest and longest lengths of FU intervals, the shortest length of FU was retrieved to calculate the mean. This was done as the largest amount of patients will be assessed during the earlier interval, a smaller part at the later interval; d. Only when all valuables were available on follow-up length, rate and complication rate, overall figures were calculated and reported, other studies were omitted from calculations; e. In case of more than one health gain was reported by the authors, this study aimed to report on primary outcomes, when not available secondary outcomes were selected; f. complication rate over 96 cleft palate patients, giving a complication rate of 34 over 96 patients; g. complication rate over 2727 procedures; h. the speech pathology workup included assigning speech scores using the Pittsburgh Weighted Speech Score, with surgical candidates (Pittsburgh Weighted Speech Score>6) being further evaluated with nasal endoscopy. Patients with scores less than 6 (borderline incompetency) were considered to have adequate velopharyngeal function; i. follow-up during mission until discharge; j. averages for CP, UCLP and BCLP surgery. Other types of surgery did not cause any complications (UCL and BCL), however, for those surgeries follow up rate and length were not available and therefore they were omitted from calculations. Speech evaluation according to Borel-Maisonny; k. according to study, 1-year follow up rate 27·62%. 5-year follow up rate: 3·7%. In total 34 complications over 257 subjects; l. 120 patients received surgery from Operation Smile. Of the 120 patients listed, 21 lived outside the coverage area of the study. Of the remaining 99 patients, 52 (53%) were located during the 1-year study period. In total, 44 patients agreed to participate in this study. Complication rate: 10 fistulas among 50 CP patients according to study: 10/50. Speech scores were administered using an open ended questionnaire that aimed to quantify across functional outcome endpoints, such as speech, eating, and appearance. Each function was scaled on a five-point scale; m. gender distribution only available for CL surgery. Extubation complications were not included as figures were not available. o. a cleft survey designed for this study assessed four axes: cost burden, impact on social development, access to postoperative care, and overall satisfaction, using a 3 point scale (agree, neither agree nor disagree, disagree); n. complication rate of 40 patients over 1122 patients according to authors. NA not available.

Supplementary material 3: post burn contracture surgery missions

Authors (year)	Affiliated organizations	Country of mission	Year of mission	Length of mission (days) <sup>a</sup>	Number of patients treated <sup>b</sup>	Age category of patients (years) a) median b) mean (...) range	Sex distribution Female (F) Male (M)	Length of follow-up <sup>c,d</sup>	Follow-up rate <sup>d</sup> patients, (%)	Complication rate <sup>d</sup> patients, (%)	Health gains
<i>Borghese et al. (2005)</i>	NA	Cambodia, Bangladesh	2002, 2003	NA	200	(3 - 60)	F 60 (30%) M 140 (70%)	NA	NA	14/200 (7.0%)	NA
<i>El Ezzi et al. (2017)</i>	Terre des Hommes	Benin and Togo	2002-2011	10	50	a) 4 (0,83 - 17)	F 28 (56%) M 22 (44%)	3-6 years	50 /50 (100%)	28/50 (56.0%)	NA
<i>Fuzaylov et al. (2015)</i>	Doctors Collaborating to Help Children	Ukraine	2011-2013	NA	39	(1 - 44)	NA	NA	NA	1/39 (2.6%)	NA
<i>Kim et al. (2012)</i>	Operation ReStore, Operation Smile and Cents of Relief	India	2010	7	38	b) 28 (2 - 58)	F 35 (92%) M 3 (8%)	NA	NA	9/60 (15.0%) <sup>e</sup>	NA
<i>Sinha et al. (2016)</i>	Operation ReStore	India	2012	6	31	b) 27 (3 - 44)	F 20 (64%) M 11 (36%)	84 days	31 (79.5%)	9/31 (29.0%)	Improvement of 5.8 points, overall level of impairment was scored by a physician according to the AMA impairment guidelines patients were assigned an American Medical Association (AMA) Whole Person Impairment (WPI) score (0–100%) based on the physical examination of each affected body region (upper extremity, face, and skin) at 6 weeks postoperatively; NA not available.

**Supplementary material 3. Post-burn contracture surgery missions. Overview of elementary data on missions, patient safety and health gains.** Notes: Data was captured as reported by authors. Figures add up in columns, may not add up between rows. a. longest lengths of missions was used, in cases where ranges were reported; b. when available, this review reports the number of patients that receive surgery, when not available number of procedures was used. If not available, this study reports on patients with presenting diagnosis; c. when studies reported shortest and longest lengths of FU intervals, the shortest length of FU was retrieved to calculate the mean. This was done as the largest amount of patients will be assessed during the earlier interval, a smaller part at the later interval; d. Only when all valuables were available on follow-up length, rate and complication rate, overall figures were calculated and reported (El Ezzi et al. and Sinha et al), other studies were omitted from calculations; e. complication rate based over number of procedures (n=60); f. SF-36 QoL: a 36-item general health questionnaire to evaluate the patient's perceived quality of life in the domains of physical, emotional, and social function, administered before and after 12 weeks postoperative; Patients' overall level of impairment was scored by a physician according to the AMA impairment guidelines patients were assigned an American Medical Association (AMA) Whole Person Impairment (WPI) score (0–100%) based on the physical examination of each affected body region (upper extremity, face, and skin) at 6 weeks postoperatively; NA not available.



Supplementary material 4: noma surgery missions

Authors (year)	Affiliated organizations	Country of mission	Year of mission	Length of mission (days) <sup>a</sup>	Number of patients treated <sup>b</sup>	Age category of patients (years) a) median b) mean (...) range	Sex distribution Female (F) and Male (M)	Length of follow-up <sup>c, d</sup>	Follow-up rate <sup>d</sup> number (%)	Complication rate <sup>d</sup> number (%)	Health gains <sup>e</sup>
<i>Bouman et al. (2010)</i>	Facing Africa and Dutch Noma Foundation	Ethiopia, Nigeria	2007, 2008	14	63	a) 17 (7 - 54)	F 41 (65%) M 22 (35%)	35 days	74/74 (100%) <sup>f</sup>	47/74 (63.5%) <sup>f</sup>	Excellent results 36% <sup>f</sup> Satisfactory 23% Mediocre 16% Poor 11% Very poor 14%
<i>Marck et al. (2010)</i>	Facing Africa	Ethiopia	2007, 2008	NA	77	b) 23.9 (7 - 60) <sup>g</sup>	F 39 (51%) M 38 (49%)	35 days	77/77 (100%) <sup>g</sup>	54/77 (70,1%) <sup>g</sup>	Good results 30.7% <sup>g</sup> Acceptable 34.6% Mediocre 17.9% Poor 7.7% Very poor 9.0%
<i>McGurk et al. (2010)</i>	Project Harar	Ethiopia	2007-2009	14	95	NA	NA	35 days	89/95 (94%)	57/89 (64.0%)	Simple surgery group: good or acceptable results 90% <sup>h</sup> Complex surgery group: good or acceptable results 40% Overall poor results 6% Overall very poor results 6%
<p><b>Supplementary material. Noma surgery missions. Overview of elementary data on missions, patient safety and health gains.</b> Notes: Data captured as reported by authors. Figures add up in columns, may not add up between rows. a. longest lengths of missions was used, in cases when ranges were reported; b. when available, this review reports the number of patients that receive surgery when no available number of procedures was used. If not available, this study reports on patients with presenting diagnosis; c. when studies reported shortest and longest lengths of FU intervals, the shortest length of FU was retrieved to calculate the mean. This was done as the largest amount of patients will be assessed during the earlier interval, a smaller part at the later interval; d. Only when all variables were available on follow-up length, rate and complication rate, overall figures were calculated and reported, other studies were omitted from calculations; e. this table only reports about the most important health gains reported, for clarity reasons; f. figures based on number of procedures. complications were seen in 47 patients (64%) of all 74 treatments. Health gain outcomes as defined by authors; g. figures based on number of procedures. 77 of 77 patients were screened on early clinical outcome, with 54 complications. Health gain outcomes as defined by authors; h. outcomes as defined by authors as follows. Good results: significantly better than at first presentation. Acceptable: much improved result, minor blemishes. Mediocre: surgical defect remains but improvement over original deformity. Poor: deformity remains similar to the time of presentation. Very poor: condition worse than when patient presented to hospital; NA not available.</p>											
<i>Rodgers et al. (2015)</i>	Facing Africa and Dutch Noma Foundation	Ethiopia	2008-2014	NA	34	(8-45)	F 22 (65%) M 12 (35%)	36 days	NA	17/34 (50.0%)	NA

Supplementary material 5: general reconstructive surgical missions

Authors (year)	Affiliated organizations	Country of mission	Year of mission	Length of mission (days) <sup>a</sup>	Number of patients treated <sup>b</sup>	Age category of patients (years) a) median b) mean (...) range	Sex distribution Female (F) and Male (M)	Length of follow-up <sup>c</sup> <sup>d</sup>	Follow-up rate <sup>d</sup> number (%)	Complication rate % <sup>d</sup> number (%)	Health gains
<i>Baran et al. (2007)</i>	Physicians for Peace + Interplast	Multiple countries	1985-2004	14	4736	NA	NA	NA	NA	NA	NA
<i>Figus et al. (2009)</i>	Interplast Italy	Multiple countries	1988-2008	21	5235	NA	F 3058 (58%) M 2177 (42%)	NA	NA	NA	NA
<i>McClenaghan et al. (2013)</i>	Project Harar	Ethiopia	2012	14	40	b) 24 (6 - 45)	NA	21 days	30/30 (100%)	7/30 (23.3%)	NA
<i>Merrel et al. (2007)</i>	Operation Smile	Vietnam	1990-2004	8	266	NA	NA	NA	NA	6/266 (2.3%)	NA

**Supplementary material 5. General reconstructive surgical missions. Overview of elementary data on missions, patient safety and health gains.** Notes: Data captured as reported by authors. Figures add up in columns, may not add up between rows. a. longest lengths of missions was used, in cases when ranges were reported; b. when available, this review reports the number of patients that receive surgery, when not available number of procedures was used. If not available, this study reports on patients with presenting diagnosis; c. when studies reported shortest and longest lengths of FU intervals, the shortest length of FU was retrieved to calculate the mean. This was done as the largest amount of patients will be assessed during the earlier interval, a smaller part at the later interval; d. Only when all valuables were available on follow-up length, rate and complication rate, overall figures were calculated and reported (McClenaghan et al.), other studies were omitted from calculations; NA: not available.