study	sample(s)	study design	results	notes
Bodlun & Kullgren (1996)	Swedish clinical sample of 10 trans women and 9 trans men, "core transsexuals"	questionnaires before and after a 5 year period (participants were at various stages in medical transition during both times), comparison of before & after responses	13 improved, 3 stable, 2 unsatisifed, 1 unsatisifed & detranstioned	
Rakic et al. (1996)	Yugoslavian clinical sample of 22 trans women and 10 trans men	questionnaires before and 6 months to 4 years (median 18 months) after bottom surgery; comparison of before & after responses	no regrets, 87% had improved body image, better social, sexual and occupational life	straight trans people only
Eldh et al. (1997)	Swedish clinical sample of 40 trans men and 50 trans women	questionnaires before and 6 months to 30 years (median 5,8 years) after SRS including bottom surgery; comparison of before & after responses	86.5% (64/74) of respondents satisfied with their lives post-SRS; 5.4% (2 people of each gender) detransitioned socially and regretted the surgeries; 4% (2 trans women and 1 trans man) commited suicide, but had many suicide attempts before SRS as well; social stability (e.g. acceptance by family & friends), surgical techniques and overall body appearance (beside genitals) were found to be predictors of good outcomes	
Landen et al. (1998)	Swedish clinical sample undergoing initial SRS from 1972-1992; 213 total	retrospective study of medical records, looked for predictors of regret after SRS (including bottom surgery)	8 detransitioners (3,8%) in total; mostly associated with poor family support and less frequently with not being a "core transsexual" or having psychosis; last year in which someone who later requested reversal received approval for SRS was 1982	time between SRS and request for reversal 1-15 years (7.4 years median), meaning that some of the more recent patients considered non-regretful here are not unlikely to have eventually still requested reversal years after the study was conducted
Rehman et al. (1999) *	American clinical sample of 28 trans women	interviews 3 years after SRS	no regrets, ability to normally return to work, more satisfactory personal and social life of patients after SRS	
Lawrence (2003)	American clinical sample of 232 trans women	questionnaires 1-7 years after SRS 1 to 7 years (most available questionnaires from people having had surgery 2-4 years ago)	59% reported improvement of quality of life as 8 or higher on an 0-10 scale, 1 reported worsening (0.45%), the rest reported no change; 86% reported their happiness as 8 or higher, 4% as 5 or lower; nobody regretted SRS overall, 6% only sometimes (mostly due to social unacceptance or functional & physical outcomes)	
Smith et al. (2005) *	Dutch clinical sample of 94 trans women and 64 trans men	questionnaires and personal interview (not all participants completed the latter) 1-4 years after SRS	virtually no gender dysphoria after SRS, independent of "subtype"; no body dissatisfaction, 91.6% were even _very_ satisifed with their bodies; better psychological functioning; 1 trans woman had strong regrets and would not choose SRS again (it is not stated that they detransitioned though), another had strong regrets but would choose to undergo it again	almost all patients in this sample had social support, only 4 (3.9%) had absolutely nobody to rely on
De Cuypere et al. (2006) *	Belgian clinical sample of 35 trans women and 27 trans men	semi-structured interviews at least 1 year after bottom surgery; median 4.1 years for trans women and 7.6 years for trans men	significant drop in suicide attempt rate (29.3% to 5.1%); gender dysphoria level dropped to that of the general population; 88.6% trans women and 85.2% trans men felt happy after surgery; regret only occasional in 2 cases, no detransitioners; improved social functioning	
Lobato et al. (2006)	Brazillian clinical sample of 18 trans women and 1 trans man	used questionnaires before and 1 to 2.5 years after bottom surgery; comparison of before & after responses	no regrets; improvement of sexual experience considered for 83.3%; 64.7% say initiating and maintaining relationships became easier; participants with a partner increased from 52.6% to 73.7%	only early-onset dysphoric trans people ("type 1 transsexuals"); excluded intersex people and people with psychotic disorders or addictions to psychoactive substances from the beginning
Newfield et al. (2006) *	recruitment through internet, bulletin boards, and postcards; mostly U.S.-American; 446 trans men	online survey; trans men with or without HRT were compared to each other	HRT significantly correlated with higher quality of life	non-clinical sample; study design means HRT is not necessarily what caused higher quality of life, it could also be that higher quality of life (e.g. wealth) enables them to access HRT more often or that there's a third factor
Kraemer et al. (2008)	Swiss clinical sample of 16 trans women and 7 trans men pre-SRS, 14 trans women and 8 trans men post-SRS	compared questionnaire responses of pre- and post-SRS people; post-SRS group had 5 months to 8 years (median of 51 months=4.25 years) follow-up	post-SRS sample scored significantly higher in measures of self-confidence and attractiveness and lower on insecurity and concern compared to pre-SRS sample; none of the tested variables were found to be correlated to the time since SRS; taking HRT or not in the pre-SRS group was not found to be correlated to any of the tested variables either	
Imbimbo et al. (2009)	Italian clinical sample of 163 trans women	questionnaires before and 12-18 months after SRS; comparison of before & after responses	94% were satisfied with having undergone surgery, 6% regretted it in some way (not stated why and whether they detransitioned)	
Nelson et al. (2009)	UK clinical sample of 12 trans men	questionnaires 2-23 months after top surgery, median of 10 months	no regrets, all patients were satisfied, felt that their self-confidence and social interactions improved	
Vujovic et al. (2009)	Serbian clinical sample of 71 trans women and 76 trans men	retrospective study and description of the Serbian trans population using available data of everyone who presented at the (at the time) only Serbian gender clinic between 1987 and 2006	no reported regrets, all patients who did would undergo SRS again, some where also satisifed with HRT only	
Weyers et al. (2009)	Belgian clinical sample of 50 trans women	questionnaires 6 months after bottom surgery	high satisfaction with self-image, good physical and mental health, but some issues with sexual functioning related to surgical outcomes; 96% never regretted the surgery, 4% (2 women) sometimes, no detransitioners	

Ainsworth & Spiegel (2010)	internet recruitment, 247 trans women	interviews before or after bottom surgery and/or FFS; comparison of people with and without certain surgeries	FFS and SRS (both together and seperate) associated with better quality of life	non-clinical sample
Johansson et al. (2010)	Swedish clinical sample of 25 trans women and 17 trans men	semi-structured interviews before & at least 5 years after being approved for medical transition; if already pursued, at least 2 years after SRS; median of 7.8 years between SRS and follow-up for trans women and 7.4 years for trans men	clinicians rated overall outcomes as favourable in 62% of the cases, patients themselves in 95% of the cases; 86% were judged as stable or improved in their overall functioning by clinicians; only 5-15% of patients were dissatisfied with some aspect (general health, surgical outcomes, etc.), but nobody regretted medical transition altogether	
Parola et al. (2010)	French clinical sample of 15 trans men and 15 trans women	questionnaires & semi-structured interviews at least 2 years after SRS	everyone was satisfied with their medical transition, no regrets; quality of life improved for almost everyone both in social and sexual aspects	
Colton-Meier et al. (2011)	internet recruitment through ftm forums, mostly U.S. Americans, 369 trans men	survey on effects of HRT; comparison of trans men with or without HRT	HRT associated with better mental health & health-related quality of life	non-clinical sample, data collection over 3 months in 2008
Pimenoff & Pfäfflin (2011)	Finnish clinical sample of 15 trans women and 17 trans men who completed medical and legal transition to the full extent that it's possible between 1970 and 2002	questionnaires after a median of 5 years after bottom surgery and 8.5 years after legal transition	significant improvement of both social and psychological adjustment after transition, regardless of compliance with standards of care of that time	A total of 88 patients were recruited, of which 3 regretted transition (3.4%) before having had completed all the possible steps of medical transition and were therefore not included in further analysis
Rotondi et al. (2011) **	Canadian sample of 205 trans men recruited through the internet, organizations, venues, etc.	survey on factors associated with depression; comparison of trans men with or without treatment	depression was associated with (among other things) not taking HRT as well as planning to medically transition but not currently doing so; less depression was associated with having medically transitioned and having had surgery before 2008 (which was defined as not recent)	non-clinical sample
Gomez-Gil et al. (2012)	Spanish clinical sample of 113 trans women and 74 trans men	questionnaires on the effects of HRT and SRS; comparison of trans people with or without HRT and/or SRS	both SRS and HRT significantly correlated with reduced depression, anxiety, and social distress	
Gorin-Lazard et al. (2012)	French clinical sample of 30 trans men and 31 trans women	questionnaires on the effects of HRT on quality of life; comparison of trans people with or without HRT; those who were on HRT have had 12-42 months=1-3.5 years (median of 20 months=1.67 years) of treatment at that time	HRT is independently linked to a higher quality of life	excluded people with psychiatric comorbities from the beginning
Budge et al. (2013)	America, recruited through support groups, 13 trans women, 2 trans men, 2 genderqueer people, 1 male crossdresser	one-time qualitative interviews on emotions and coping mechanisms during various stages of transition	"affirmative emotional experiences" commonly associated with HRT (16 of the participants went on HRT)	non-clinical sample, qualitative rather than quantitative, unusually diverse sample in terms of sexual orientation
Colizzi et al. (2013)	Italian clinical sample of 45 trans women and 25 trans men	questionnaires & blood test before and 12 months into HRT; tested stress, attachment patterns, and cortisol awakening response (CAR)	HRT decreased CAR levels and perceived stress regardless of attachment style	excluded intersex people and people with psychiatric pathologies from the beginning
Costatino et al. (2013)	Italian clinical sample of 50 trans men	questionnaires on the impact of medical transition before HRT, 12 months into HRT, and 6 months after SRS (no genital surgery)	HRT improved sexual function and SRS reduced aggressiveness, but also reduced sexual function again (which might be because SRS did not include bottom surgery and disappointed some, or because not everyone was done recovering from SRS when filling out the questionnaire); more positive mood changes occured but were not statistically significant (see table 3); insomnia and sweating increased with HRT	excluded intersex people, drug addicts, and people with psychiatric comorbidities from the beginning
Gorin-Lazard et al.(2013)	French clinical sample of 36 trans women and 31 trans men	questionnaire on the influence of HRT on self-esteem, mood, and quality of life; comparison of trans people to each other	HRT independently associated with less depression, greater self-esteem and better psychological well-being	
Weigert et al. (2013)	French clinical sample of 35 trans women	questionnaires 3 weeks before and 4 months after breast augmentation, which was performed a median of 16 months after bottom surgery; 21 patients completed the questionnaire a third time 12 to 39,6 months=1 to 3.3 years (median of 20.7 months=1.7 years) after surgery	significant improvement in all measured areas (sexual, psychosocial and physical well-being) after surgery	
Bailey et al. (2014)	UK, internet recruitment, 889 people of which 778 desired or underwent medical transition to some degree	questionnaire about suicidal ideation & attempts; comparison of trans people to each other	suicidality associated with denial of desired medical treatments	non-clinical sample
Boza & Nicholson (2014)	Australia; recruitment via internet, support groups, snowballing; 83 trans men and 160 trans women	questionnaire on mental health; comparison of trans people with each other	SRS associated with less depression	non-clinical sample

Colizzi et al. (2014)	Italian clinical sample, 78 trans women and 29 trans men	questionnaires before and 12 months into HRT	12 months HRT approx. halved prevelance of all bad measures (psychiatric distress, functioninal impairment) across sample	intersex people and people with unstable psychiatric comorbidities excluded from the beginning
Davis & Meier (2014)	American sample of 208 transmasculine people (including trans men, genderqueer, and genderfluid people); recruitment through internet and local communities	survey; comparison of trans people who did and did not have HRT and/or top surgery; in case of the use of HRT it ranged from 1 week to 35 years (median of 3,62 years); time since top surgery (if performed) not recorded	reduction in anxiety, depression, anger and an increase in body satisfaction associated with with HRT and top surgery	
Dhejne et al. (2014)	All Swedish citizens who applied for SRS and legal name change from 1972 to 2010 (252 trans men and 478 trans women)	retrospective study of transition regret using official data	regret rate of 2.2% for both genders and an additional 1.2% (across both binary genders) who have withdrawn their application themselves before it was evaluated; time from first legal gender change to regret application was 75-137 months (6.25-11.4 years) or a median of 90 months (7.5 years) for trans men, 22-177 months (1.83-14.75 years) or a median of 102 months (8.5 years) for trans women	regret rate decreased a lot over time from 27% in 1960-1971 down to 2.4% in the 1991-2000 time period and 0.3% in 2001-2010 (although there may be some cases of regret in the last group who have no yet applied for reversal, as the median time from first legal sex change to regret application is around 8 years)
Fisher et al. (2014)	Italian clinical sample of 66 trans women and 59 trans men	questionnaire about body uneasiness & correlation with HRT; comparison of trans people with or without treatment; HRT was taken 1.5 months to 30.125 years (median of 430 days = around 14 months) by trans women and 33 days to 2.8 years (median of 799 days = around 2.2 years) by trans men	HRT duration and higher dosage independently correlated with decreased body uneasiness for trans women, but not for trans men; the authors write that the latter might be, for example, due to HRT not significantly reducing chest size in trans men (which can be a major source of body uneasiness for them)	excluded people who were intersex, had changes in HRT treatment before the study, had internalized homophobia, or were diagnosed with mental retardation or transvestite fetishism
Gomez-Gil et al. (2014)	Spanish clinical sample of 119 trans women and 74 trans men	questionnaire about factors associated with better quality of life in trans people before bottom surgery; comparison of trans people to each other	better quality of life associated with (among other factors) being on HRT	
Hess et al. (2014)	German clinical sample of 254 trans women	questionnaire on satisfaction 1-7 years (median of 5.05 years) after SRS	87.4% were satisfied or very satisfied with their outward appearance as women; 72% were satisfied or very satisfied with the functional outcome; 1 full detransitioner (sees himself as male) (1%), 3 people who see themselves as "more male than female" (2.9%)	
Heylens et al. (2014)	Belgian clinical sample of 46 trans women and 11 trans men	questionnaires before treatment, 3-6 months into HRT, and 1-12 months after SRS; tested for psychopathology	medical transition leads to a significant reduction of psychopathology in areas such as depression, anxiety, somatization, psychoticism, interpersonal sensitivity, hostility, and overall psychoneurotic distress	one person commited suicide during follow-up
Manieri et al. (2014)	Italian clinical sample of 56 trans women and 27 trans men	questionnaires about quality of life before and 1 year into HRT	HRT improves quality of life and seems to be free of major risks in healthy individuals under clinical supervision in the first year	excluded intersex people and people with severe psychopathology from the beginning
Castellano et al. (2015)	Italy, recruitment through local ads, 46 trans women and 14 trans men, local cis control group	questionnaires on the psychological & sexual effects of bottom surgery; at least 2 years and up to 33 years after SRS	trans sample scored similarly to cis controls in quality of life and body image; trans men slightly worse in sexual life subscale than cis men	non-clinical sample
Keo-Meier et al. (2015)	American sample of 48 trans men and 53 cis men & 62 cis women as controls	questionnaires before and 3 months into HRT on psychological function	3 months of HRT led to decreased psychopathology and betterment in psychological functioning on multiple domains	non-clinical sample
Ruppin & Pfäfflin (2015)	Germany, 35 trans women and 36 trans men	standardized questionnaires & qualitative interviews about quality of life at initial contact and 10-24 (mean 13.8) years after legal name & gender marker change***; almost all participants took HRT and had at least one SRS	high life satisfaction, employment, good social integration, gender dysphoria remained reduced, other psychological problems decreased too	The drop-out rate of 50.7% is often criticized, with the argument that those with worse outcomes are more likely to drop out and then skew the result in a positive direction. However, many of the non-respondents had legitimate reasons for not responding that were not connected to psychological health (34) or could not be located (9) which might be simply due to having moved and attempting to leave no trace/going stealth (common with trans people). 2 have died, which, you know, all living things have a habit of doing in the long-term. Only 28 did not respond for entirely unknown reasons and 1 person had such bad mental health that they were in a mental institution, resulting in a genuine drop out rate of 26.4% (28 out of 140 contacted people) rather than 50.7%.
Bar et al. (2016)	Israel, internet and local recruitment, snowballing; 22 trans women (all medically transitioning) and 22 cis women	questionnaires on changes of occupational well-being over time; trans women compared to cis women	occupational well-being improved for both groups, but steeper for trans women who started out lower on the scale (likely due to gender dysphoria that cis women don't have/have much less) with the gap reducing over time (likely because their gender dysphoria reduced over time as they advanced in their social & medical transition and experienced positive effects from it)	non-clinical sample; only indirect investigation of effects of medical transition
Bouman et al. (2016)	UK clinical sample, 71 trans women over the age of 50	questionnaires on psychopathology and clinical measures, at initial contact; use of HRT occured in about half of participants prior to clinic referral; comparison of trans people to each other	use of HRT prior to referral associated with less anxiety, but not less depression	purposefully uses a sample of older transitioners

Cardoso da Silva et al. (2016)	Brazillian clinical sample, 47 trans women	questionnaires on psychological and social functioning, physical health, level of independence before and at least 1 year after bottom surgery (including HRT before it)	significant improvement of psychological and social functioning, but significant worsening of physical health and level of independence; although this can easily be justified with having to recover after bottom surgery according to the authors; those who had more recent revisions (further interventions to correct complications) had worse (but still good) outcomes than those who did not	people with psychotic disorders, mental retardation or substance addictions were excluded from the beginning
Glynn et al. (2016)	American sample of 573 trans women with a history of sex work	one-time self-report on the role of gender-affirmation on psychological well-being; comparison of trans people to each other	gender affirmation (including medical) associated with less depression and higher self-esteem, although no domains of gender affirmation (social, psychological nor mental) were associated statistically significantly with suicidal ideation	non-clinical sample
Padula et al. (2015)	extracted model parameters from the National Transgender Discrimination Survey (NTDS) (2011) of adults, which had 6436 US-American respondents	cost-effectiveness of insurance coverage for medically-necessary trans-related services (e.g. medical transition); used Markov model with 5-10 year time horizons from US societal perspective	provider coverage of trans-related care was cost-effective (i. e. reduced more costs [e.g. on treating HIV, depression, drug abuse, etc. that would be likely to occur from denying coverage for medical transition] than it costs to cover medical transition) in 85% of simulations; budget impact for individual members is 0,016$ per month	
van de Grift et al. (2017a)	European (Dutch, German, Belgian, Norwegian) clinical sample of 135 transfeminine and 66 transmasculine people	questionnaires on gender dysphoria & body image at admission and 4-6 years after it (participants were at various stages in their medical & social transition at follow-up and were not all finished)	gender dysphoria decreased in all participants at follow-up (including those who were unable to or decided not to medically transition, either because social transition was enough or because they desisted), but it did so twice as much in those participants who had received both HRT and SRS, whose gender dysphoria levels were now comparable to cis people; body image improved both regarding transition-responsive areas (i. e. body parts/traits that can be changed) and those that are not responsive;	29 people had not medically transitioned at follow-up (non-treatment group), most due to circumstances and a few due to their own choice; of the 29 people only 7 were confirmed to fulfill diagnostic criteria; due to an error, in the non-treatment group only the gender dysphoria of those who had socially transitioned (9 people) was assessed - they generally already showed lower scores of gender dysphoria than those who did later get medical treatment; 2 of them socially detransitioned; 9 people of the non-treatment group said they do not plan to re-apply for medical treatment in the future, 8 were unsure, 6 were going to
van de Grift et al. (2017b)	same sample as above but only considering the 136 people who received both HRT and SRS (81 trans women, 51 trans men, 4 missing data)	questionnaires on quality of life & satisfaction at admission and 4-6 years later	satisfaction with SRS was 94% to 100% (depending on procedure), quality of life increased after SRS; nobody reported major regret; 6% (9 people) reported dissatisfaction or minor regret about some SRS they underwent, for 8 of whom it is tied to complications rather than realizing they're not trans - 1 trans woman did not specify her reason for dissatisfaction; no significant differences of gender dysphoria levels in trans people after HRT and SRS compared to cis controls	some missing data for 2.9% of participants who had HRT and SRS
Lawrence (2006) *	**same sample as Lawrence 2003**	questionnaire about mostly physical health and quality of life, 1-7 years after SRS, median of 3 years	high satisfaction with bottom surgery	not very focused on psychological health or gender dysphoria (only 4 questions addressed it)

Notes:

* overlaps with Murad et al. (2010)

** link on Cornell University website broken

*** until 2011, sterilisation was necessary to change your gender marker in Germany. This means bottom surgery was also at least 10 years earlier for all participants, as all had changed their gender marker before 2011

Megeri & Khoosal (2007)	UK clinical sample of the first 40 trans women attending the clinic	questionnaires about depression and anxiety in trans women before and 3 years after SRS	statistically insignificant decrease in depression and anxiety, the anxiety decrease was the only measure close to being statistically significant. Note that the scales showed no evidence of depression at _any_ point, despite some trans women reporting feeling more depressed pre-SRS. The authors speculate that people lied about their psychological stability pre-SRS to not risk being denied the procedure or that the questionnaire wasn't sensitive enough for their sample	unusual sample: 0% drop out rate (all people invited to participate returned both questionnaires) and many people in it had already attended other gender clinics before this one
Barrett (1998)	clinical sample of 23 trans men accepted for bottom surgery (phalloplasty) and 40 trans men who had already undergone phalloplasty 6 months to 3.3 years prior	questionnaires about general health, psychological health, satisfaction, sex role, and semi-structured interviews about drug use	The post-operative group showed more depression, but more satisfaction with genital appearance. Satisfaction with relationships was worse but to a non-significant extent, which the researchers propose could be caused by the increased depression. Other changes went "in the expected direction but did not achieve significance". Trans men accepted for phalloplasty showed, in general, good psychological health.	
Khoosal et al. (2008)	UK (random) clinical sample of 40 trans women	questionnaires about psychological functioning 6 months before and after SRS (presumably bottom surgery, as this is most commonly studied in trans women, but I can't access the pdf via sci-hub so I can't check)	no significant changes	6 months might have been a too short time after surgery, as patients might still have been in physical recovery. In the study's own words: "This study may be limited by the duration of reassessment post-surgery."

Simonsen et al. (2016)	Danish clinical sample of 56 trans women and 48 trans men (98% of all people in Denmark diagnosed with "transsexualism" between 1978 and 2010)	retrospective register study of psychiatric morbidity and mortality before and after (presumed date of) bottom surgery	mixed results: Psychiatric morbidity decreased from being present in 27.9% to 22.1% of the sample after SRS, which was statistically insignificant. 21.2% (22 people) exhibited psychiatric morbidity pre-SRS but not post-SRS, 15.4% (16 people) exhibited not morbidity pre-SRS but did get diagnosed post-SRS, 6.7% (7 people) exhibited it both pre-SRS and post-SRS. Quoting from the study: "This suggests that generally SRS may reduce psychological morbidity for some individuals while increasing it for others."	The study did not examine whether gender dysphoria itself decreased or increased in these people. An increase of psychiatric morbidity for some people does not indicate this necessarily, as it may well be attributable to social stigma (and resulting disadvantages in education, employment, etc.) rather than a change in identity or worsening of gender dysphoria. The discussion section of the study notes this possible explanation for the results too.
Lindqvist et al. (2017)	Swedish clinical sample of 190 trans women	questionnaires about quality of life before SRS, and then 1, 3, and 5 years after bottom surgery	no significant changes: non-significant decrease in quality of life that is consistent to the decline of quality of life of the general population in that time frame; self-perceived health rose in the first year after surgery, but declined afterwards	