

Patients' Experiences of Incomplete Sex-Reassignment Surgery and Psychosocial Functioning

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ABSTRACT The study investigated experiences of patients on sex reassignment surgery (SRS), who did not complete the surgical process. Some of these patients would never finish it. Two prominent reasons are lack of funds and loss of interest to continue the process. The study objective was to identify the experiences that led to obliterated interest in continuing with the process. Purposive sampling was used to select the respondents. The sample was generated through snowballing since these patients were not all known. Five participants assisted to pilot and correct the interview guide. Suitable prospective participants were fully informed of the study details, and participated under confidentiality and anonymity agreement. A total of 26 respondents participated in the main study. They indicated that SRS was surprisingly complex. SRS frustrated them and provided difficulties never experienced from their original genders. Few would complete the surgery if they could, but others regretted having started.

INTRODUCTION

Traditional sexual guide admits normal placement of people in the gender identity that may be against their wish. Modernity, instead, allows people to decide on their desired sexual orientation. Gays and lesbians are common examples. Another example is to physically alter sexuality through SRS. Changing sexuality is done under the impression of reaching pleasure. Lindqvist et al. (2017) also believes that early after SRS, the quality of life improves. Sutcliffe et al. (2009) define SRS as a process that entails a decision to change a person's biological sex by medical intervention. There are new developments concerning choice of sexuality. Nevertheless, there are still grave challenges in some communities in accepting this choice. Markussen (2017) explains that after SRS, participants have to explain the new gender to acquaintances. Also, Stoncikaite's (2017) explains the reduced sexual performance of SRS participants. Developed countries commonly embrace and permit this freedom of choice. They legalize gay and lesbian marriages, and support their medical treatment by supplying them with suitable medicines. Lawrence et al. (2005) state that many European countries offer transsexuals the right to change

their names, and recognize their right to marry according to their post-operative sex. Other nations still do not accept the notion. Several authors (Dallas 2006; Nielsen and Rudberg 1994) inform that sex change is prohibited in Philippines. The Filipinos do not have the right to legally change their gender on official documents after SRS or transsexual operation. In Africa, countries such as South Africa embrace the policy and people have the right to change sex and orientation. The problem is that in some communities, many people lack education and understanding and thus, do not accept these choices (Kuipers 2005). Many participants who choose these replacements are often discriminated against and stigmatized. The discriminatory actions against these people are widespread in work and community environments.

An inadequate consequence is that organs fabricated using SRS do not give the performance of a natural one (Barrett 2007). Consequently, an apparent crucial problem is weakened sex performance after undertaking SRS. Seemingly, penises of 'new' men fail to function as proficiently as the original penis. The sex performance is not as pleasurable for a transformed woman as when he was still a man. Women operations also lead to substandard performance.

These, therefore, cause sex frustrations. It may then decrease intimate relationships of which sex is a core activity. Therefore, sex change is certainly not reflected as comprehensive because the created organs tend to function incompetently (Monstrey et al. 2011). It is desirable to expose the experiences of people with incomplete SRS in their ensuing relationships.

Study Objectives

The objectives of the study were to determine the experiences in intimate relationships after individuals started the transitioning or SRS process, to describe the experiences of their gender transitioning process, and to determine the impact on interpersonal relationships.

Sexual Reassignment

The focus is fundamentally the life experiences of individuals after hormone therapy, and not beyond the surgical process of altering the genitals. Therefore, the study plan is to understand the psychosocial functioning of an individual after an incomplete SRS.

Sexual Reassignment Surgery

There are men who believe that they should have been women, but that they were trapped in men's biological appearance while some women feel they should have been men (Leinung et al. 2013). Trans-sexualism is a disorder wherein a person experiences incoherence between their allocated sex and the way they believe their core gender should be. An individual recognized as 'female' at birth, raised as a girl, and lived being considered by others as a 'woman', might feel that their essential sense of who they are is a closer fit with 'male'. If this conviction is strong and persistent, such individuals may take steps to warrant that others recognize them as they aspire. Contingent on the liberty and resources available, some decide to change their sex using SRS. Generally, SRS is a multifaceted occurrence that needs a multi-disciplinary tactic in order to provide a psychologically firm result (Spack 2013). There are surgical measures involved and psychological effects resulting due to the experiences during and after the operations.

Intervention Methods

Changing sex might breed fulfillment in some areas of the lives of these individuals. However, it may also nurture displeasures on other life aspects (Cohen-Kettenis and Pfafflin 2003). Psychotherapy and surgical interventions could be considered jointly to support an effective combination for people who consider such a possibility. Trans-sexualism is a distress which could encourage some of these people to consider interventions such as SRS (Nakatsuka 2012).

Sexual Identity

Gender is a significant portion of individual identity useful is social differentiation and social placement (Ekins and King 2006). Societies understand gender, the number of people and gender categories there are, what characterize members of each category and so on. Societies express their understanding of gender in composite and mostly unwritten set of rules that convey what to expect of other people's behaviour in both predictive and in a normative sense. Sexual identity, or gender, is a notable identity feature (Pfäfflin and Junge 2003). It may be considered as encompassing three (3) components, an individual's basic conviction of being male or female; an individual's behaviour, and what people believe. This, as Lorenzi et al. (2006) recommend, is culturally connected with males or females (masculinity and femininity), and a person's inclination towards male or female sexual partners.

Modernity permits individuals to consider gender not as something people have, but to consider the fabrication of a gendered social identity as a continuing achievement that is continually being done (Meyer-Bahlburg 2013). Some societies still recognize only two genders of the rudimentary decree of gender identity that only biological males should be males and only biological females should be females (Bertelloni et al. 2006). This makes trans-sexualism a mystifying challenge to psychosocial theories of human development, to social organisation and to medical theories of the sources of maleness and femaleness (Lindell 2008). Through trans-sexualism, females become males and males become females.

Cross-dressing

It does happen sometimes at an early age that an individual finds that the biological sex allocated at birth is unrelated with personal moods of maleness or femaleness (Dallas 2006). At that time, cross-dressing, in which boys wear feminine dresses and girls wear masculine clothing, may be a response to that feeling. Cross-dressing is usually considered at the person's own initiative and without related sexual delight. It may create a sense of comfort which no other means can provide. The fulfillment could then be improved to wishes for hormonal and surgical treatment (Meyerowitz 2002).

Some Unattractive Consequences of Trans-sexuality

Some trans-sexuals have an imperfect or absent sexual life. Male trans-sexuals fancy masculine 'straight' men intimately for relationships that are 'heterosexual'. This is mainly because the patient believes that he is female and thus naturally attracted to men. Heterosexual activity is accompanied by the fantasy of being a woman made love to by a man (Leinung et al. 2013). This fantasy is necessary in order to achieve arousal and orgasm. Body image has a specific bearing on trans-sexualism, and is imperative for one's self-concept. Body image is both the way people observe their own bodies and also the way they view these perceptions. The trans-sexual cannot form a pleasing body image because of the incongruence between anatomic sex and gender identity. Thus, the body of a trans-sexual resists the preferred body image, and distracts the creation of a complete and consistent self-concept.

SRS Preparation

In order to support the physical body with the psychological gender identity, some trans-sexuals choose SRS. The SRS procedure characteristically involves three (3) essentials of triadic therapy, namely hormone therapy, real-life experience and surgery (Bowman and Goldberg 2006). This process is called 'sexual transitioning' because it necessitates an evolution over time. Social reassignment is often suggested before the person commences with SRS because it requires living and working for few years as if

the person is already a member of the opposite sex (Barrett 2007).

SRS Process

SRS process is 'migrating' because the individual literally transfers from one gender to another (Ekins and King 2006). A migration individual is 'out of place', converting out of the birth sex but not yet into the desired sex. Due to the rigorousness of the conflict and ordeal suffered over an extended period when on SRS, it seems that once started, the process could be smooth for individuals to be relieved (Murad et al. 2010). However, this is not the case. Bancroft (2009) and Smith et al. (2005), among others, point out that many transitioning individuals fail to complete the surgical process. They leave the sex change process at the stage of hormone therapy.

Perspectives

Medical Perspective of Abnormalcy

Customarily, natural sexual orientation (male or female) is considered standard. Also, the medical perspective generally implies that normalcy is desirable compared to abnormalcy. Thus, trans-sexualism is regarded as abnormalcy (or pathology) while normalcy is a synonym for health (Chilland 2003). Health and pathology are defined in scientific criteria which claim impartial reality based on experiments, laboratory exploration and verified hypothesis. Therefore, the medical model has embedded support for interventions both invited and obligatory to deliver health for the patient. Patients are not answerable for their disorders. However, it is believed that they want to recover. They are presumed to be unable to correct their condition and thus rely on others for help. The medical model theorizes social reality as thoroughly resolute. It also regards social and human processes as static and natural entities, and being unable to account for social factors. Its application to functional disruption has thus been criticised as unfitting and reductionistic. In solving the medical problem, relational hitches occur for which the individual is not comprehensively ready. This weakness of the medical viewpoint also considers the trans-sexual as though she/he has no interpersonal relationships (Chilland 2003). The perspective is further accused of being unscientific

and causing harm (Stroumsa 2014). Having laid the theoretical base, the focus shifts to the biological SRS.

Biological Perspective

Technically, human sex cannot truthfully change and so, SRS is not 'sex change surgery'. The notion is to rework the physical appearance of a person's anatomy to approximate as nearly as possible the anatomic arrangement of the other sex (Mocke 2006). This procedure includes extended hormone therapy, which alters secondary sexual features. For male to female transsexuals, SRS entails developing breasts and body fat in particular areas. For female to males, it softens the voice, and grows body hair and beard (Bowman and Goldberg 2006). At times, assorted considerations emerge while the person is on SRS. Consequently, Bowman and Goldberg (2006) advise that after the decision for transsexualism, recommendation for SRS should be based on strict criteria of evidence of stable transsexual orientation; individual's insight into his/her condition and no serious psychiatric disorder; ability to pass successfully as a member of the opposite sex with clear evidence of cross-gender functioning; and improvement in personal and social functioning be predicted for the individual. Also, a psychologist or psychiatrist should be recommended, and a minimum age of 18 years should also be required.

SRS Facts

Altered physical structures may be noticeable, but the womb of a new female and the penis of a new male produce substandard results (Verma 2010). The penis fails to get erect and the womb cannot conceive a baby. Henceforth, the biological benefits are not achievable. Professional association with people of gender identity disorders comprises of psychotherapy, hormonal therapy, surgical therapy and real life experience of living the intended gender (Bowman and Goldberg 2006). When the disorders set occur, each surgeon also performs an HIV test at their facilities. A personal interview is also conducted to verify the individual's mental and physical preparedness for the process.

Trans-gendering Accomplishment

Trans-gendering is completed by varying the signifiers using five steps: 'erasing', 'substitut-

ing' 'concealing', 'implying', and 'redefining'. *Erasing* entails eliminating aspects of maleness or femaleness, masculinity or femininity. A genetic male may be castrated to replace a penis with a vagina, or a genetic female may undergo a hysterectomy, also referred to as Bottom Surgery (Cohen-Kettenis and Pfafflin 2003). Both males and females may wear unisex clothes and adopt un-gendered mannerisms.

Substituting requires replacing the body parts, identity, dress, posture, gesture and speech style that are related with the original gender, with those related with the future gender (Ekins and King 2006). Breasts, also known as Top Surgery, may replace a flat chest (Cohen-Kettenis and Pfafflin 2003), smooth skin may replace rough skin, no body hair replaces body hair, and long hair could replace short hair. The extent of replacement relies on specific individual factors.

Concealing refers to hiding things perceived to conflict with the envisioned gender display (Ekins and King 2006). These could be by covering body parts, enfolding the Adam's apple, inserting the penis or binding the breasts. *Implying* entails the gendered form of the body beneath. The body is usually apprehended in social interaction in its clothed form (Ekins and King 2006). *Redefining* is subtle and multilayered (Ekins and King 2006). At one level, the nature of the body, body parts and gendered additions may be re-defined.

Reasons for SRS Incompleteness

One reason for not competing SRS could be financial. This is when the individual cannot pay for the required surgical procedure to complete the process. Another reason could be when a person on an SRS procedure achieves a sense of congruence after the hormone therapy (Meyerowitz 2002). For others, it could be the anxiety with which they view the surgical process. They can lack guarantee that the desired genitals will work satisfactorily for them or their future partners (Lawrence et al. 2005). As an example, in female-to-male transsexuals, phalloplasty (construction of a penis) is a complex multi-stage operative procedure with universally disappointing results to this date. Until surgical techniques improve, the female transsexual is better served by peno-scrotal prostheses obtained from a manufacturer of plastic surgical appliances. In

this way, some relief of anxiety and embarrassment about physique and incapability to function sexually as a man can be attained.

SRS Limitations

For the male-to-female trans-sexual, the desired treatment process end-product is the appearance of a female with female secondary sexual characteristics. Surgery should address these artificial displays. The created 'females' retain their male chromosome pattern and internal male secondary sexual organs, do not menstruate, have no uterus, have no ovaries, and are therefore unable to reproduce (Kuipers 2005). When a male has acquired the body of a female, the critical success relies on the development of a 'feminine' appearance, and a lifestyle to support and balance the body appearance (Verma 2010). For individuals who do not change the physical surgical for several reasons, the incomplete sex change stage continues. It fluctuates in duration for two years to a lifetime. The medical model role initiates the diagnosis and treatment of trans-sexualism. However, it is vital to recognize the multifaceted nature of human existence. Individuals' life conditions are diverse, but each individual is unique (Barret 2007). Therefore, it is crucial to include the political and cultural processes of the individual, and to discuss the political context of being trans-gender.

METHODOLOGY

Study Design

An exploratory, qualitative research design was used to investigate personal experiences of individuals who have had incomplete SRS, and the impact this had on their lives. Qualitative research involves an interpretive, naturalistic approach to its subject matter, with no use of numeric to find answers to the research question (Henning et al. 2005). This basically means that qualitative researchers study phenomena in their natural settings, attempting to make sense of, or interpret occurrences in terms of meanings which people who experience them, perceive them. It seeks to make sense of personal experiences and the ways in which these individuals interact to those experiences. It allows for active involvement of participants and effec-

tive building of rapport, and therefore improves credibility in the study (Bless et al. 2006).

Ethical Consideration

Permission to collect data was obtained from the University of South Africa to review the proposed study, Tembisa Hospital to allow use of patients and the local association dealing with trans-gender communities. Information about the study intentions was distributed to inform potential respondents, and to solicit interest for participation. A consent form was also completed by willing participants.

Sampling

A sample was selected from the study population who were patients with incomplete SRS at the Tembisa Hospital in the East Rand of Gauteng Province in South Africa. Sampling is the process used to select cases for inclusion in a research study (Bless et al. 2006). The study applied a two-fold sampling tactic to exploit the possibility of obtaining research samples. These were the purposive, and then the snowball sampling systems. Purposive sampling best suited the study because it is less strict and makes no claim for representativeness. The selected respondents for the research sample had undergone one form of the SRS surgeries. At least one of the SRS treatments took place during the time of this survey. These participants had started with hormone treatment but had not completed the surgery. They were at least 18 years old. They could communicate in English, and were willing to participate in the study. The sample size was not predetermined since the study would end data collection when saturation was achieved during the interviews. Saturation occurs when the respondents echo what others have already mentioned, and no new information emerging from additional respondents. In this study, saturation was indicated after 18 respondents, and the study was terminated after 26 responses when saturation was clearly evident.

Data Collection

Interviews were conducted in privacy. Participants' confidentiality and anonymity were ensured. The interview guide was used to gather information by face-to-face basis. This allowed

the interviewees to speak for themselves, telling their own stories. The reason for using interviews to collect data was because it is the most suitable approach to gather the required data about personal experiences. Interviews gave the advantage that the interviewers could establish rapport with the respondents. The interviewers could probe for more elaborations where it was necessary. They could notice when the respondents misunderstood some questions, and could clarify all the misunderstanding. Also, by permission of the respondents, the interviews were audio taped, and data transcribed verbatim. Thereafter, the transcript was given to three (3) independent clinicians who were requested to analyse the data to safeguard the validity and reliability of the study.

Data Analysis

Thematic analysis was used initially. It focuses on examining themes within data, stressing organization and description of the data set (Guest 2012). Its interpretation can include theme frequencies, and graphical displays, among others. To enhance optimum information extraction, phenomenological data analysis was also used. Phenomenology is a qualitative research method focusing on identifying the inherent and unchanging in the meaning of the research issue (Chan et al. 2013).

RESULTS

This section presents the study findings and then explains them. During the interviews, saturation was signaled around the 18th respondent. However, after the 26th respondent it was clear that every other respondent was echoing inputs of the previous responses.

Findings

The themes extracted are given according to the number of times each theme occurred. Hence, Table 1 is based on the number of times the respondents cited them. The themes emerged from several respondents. Thus, some cases include where a single respondent could have had more than one issue. The total frequency counts therefore exceed the number of responses.

Table 1: Table of themes

<i>Themes</i>	<i>Frequencies</i>	<i>Percentages</i>
(i) Feeling judged and rejected after sex reassignment surgery	19	73.1
(ii) Feeling content with the surgery undertaken in that the physical appearance now represents for the participant his/her psychological gender	18	69.2
(iii) Experiencing unconditional acceptance and empathy	18	69.2
(iv) Ineffective integration in intimate relationships leading to feelings of uncertainty and withdrawal	12	46.2
(v) Subjective experience of incongruence and uncertainty with regard to new gender roles	7	26.9
(vi) Pragmatic and administrative difficulty when it comes to identifying oneself to authority and service providers	4	15.4

Explanation of the Findings

Most respondents claimed experiences of new difficulties which were neither visible in their original gender nor their intended new gender. For example, the middle of the process was tangibly painful, mentally confusing, and frustrating due to uncertainty regarding the result. The complexity of SRS was also underestimated, since it was much more than the participants thought. The participants believed that SRS needed a dynamic multidisciplinary approach that could help resolve psychological problems. They experienced no acceptance in their environments. They also received no empathy because they could not effectively integrate in intimate relationships. These led to uncertainty, isolation and withdrawal from relationships.

Other participants experienced personal satisfaction with the surgical changes they undertook. However, there were frustrations with these experiences as they were stalked by feelings of rejection on an interpersonal relationship level. This was an experience of dissatisfaction on an emotional level.

Furthermore, the participants identified subjective experience of incongruence and uncertainty with regard to new gender roles. They pointed out that this presented difficulty in integrating in social contexts.

For many participants, what they thought would be a solution seemed to have turned into a new problem. The experiences basically presented the participants with practical difficulties. After the transition, the participants found themselves having to explain their gender to authorities, new friends, potential lovers and colleagues. Therefore, even though the gender-transitioning could have solved the gender identity dilemma, it fundamentally replaced it with a set of other complex pragmatic difficulties. Many of the relationships are sustained by using medications and boosters to enhance sex performances. There is also the realisation that reverse is not possible, and no more possibility of full natural functionality.

DISCUSSION

All the respondents agreed that sex change resolves their gender identity. However, it caused a myriad of complex interpersonal difficulties which indicated that sex change is not a straightforward solution to gender identity dilemma. This was inconsistent with Lindqvist et al. (2017) who concluded that early after gender reassignment, the quality of life improves.

The respondents attested that sex change also has a huge impact on the work context to the degree that it complicates work relationships, and creates new challenges. This is consistent with Markussen (2017) that explanations are required regarding the new gender to colleagues, superiors, friends and relatives, and with impediments especially in the workplace.

On a romantic level, some respondents experienced approval albeit with major adjustment difficulties. The change also generated the risk of losing prevailing relationships and apprehension in starting new ones. This is in line with Stoncikaite's (2017) impression that reduced sexual performance is one of the causes of weakened and/or unsustainable relations.

Experiences indicated that after deciding to undergo SRS, the participants needed some exhaustive psychological counselling before and after the surgery. Such practice is common in developed countries (Berdychevsky and Nimrod 2017). This could also assist the patients to achieve a higher likelihood of adjustment in interpersonal relationships afterwards.

Psychotherapy was thus essential during and after the sex change process in order to prepare the participants properly for final adjustment to their new gender realities. According to Raffaini et al. (2017), psychotherapy has potential to ensure a smooth transition in the new identity.

CONCLUSION

Some SRS commence without reaching their finalisation. Others that are completed do not reach the full functional capacity of the natural biological gender. It is also not possible to reverse the operation back to the original gender with full capacity when the participant experiences the frustrations of the new gender. Generally, new genders are both debilitated to a point. This therefore reveals SRS to be a risk. The general study finding is that SRS is a complex phenomenon necessitating a multidisciplinary tactic in order to produce a psychologically steady outcome.

The findings present a mixed clinical portrayal. There is some level of satisfaction and pleasure with the transitioning process, but there are some new hitches emerging. Total acceptance and empathy are deficient. Intimate relationships suffer. Uncertainty, isolation and withdrawal from such relationships emerge. Participants may experience personal satisfaction with the surgical changes undertaken. These experiences are offset by rejection in interpersonal relationships. This then breeds dissatisfaction.

Also, subjective experience of incongruence and uncertainty regarding new gender roles creates difficulty in integrating in social contexts. Thus, the planned solution becomes a new problem by presenting the participants with practical problems. After the transition the participants have to explain their gender to authorities, friends, potential lovers and colleagues.

Mixed results seem to be predominant with all the respondents. It creates many complex interpersonal complications. Sex change impacts largely at work. It obfuscates work relationships and creates new challenges. On a romantic level, some respondents risk loss of relationships, and others fear to initiating new relations.

SRS therefore, necessitates thorough psychological counselling throughout the process to enhance higher adjustment prospects in interpersonal relationships afterwards. Psychother-

apy is required after the sex change to prepare the participants to adjust to their new gender realities.

RECOMMENDATIONS

Trans-genders who are excited by opportunities of SRS should be educated about the experiences of past SRS exercises, as well as the risks involved in engaging in it. The experts should ensure that information is given at every stage of the contact when talk of SRS and the envisaged surgery is being awaited. Counseling should also inform of the possible risks of SRS. Also, evidence that there are various people who could not complete the exercise should be shared with the ones waiting for their turn. Where possible, SRS participants who started the surgery should be invited and encouraged to share their experiences with the ones who wish to pursue the exercise. They should also be interviewed more than once, by several health experts from varied viewpoints, to ensure that they realise the risks involved with SRS. No single participant of the surgery should be allowed without proper interrogation and conviction that they know what they would be about to lead themselves into.

REFERENCES

- Barrett J 2007. *Trans-sexual and Other Disorders of Gender. Identity: A Practical Guide to Management*. New York: Radcliffe Publishing.
- Bancroft J 2009. *Human Sexuality and its Problems*. London: Elsevier.
- Berdychevsky L, Nimrod G 2017. Sex as leisure in later life: A netnographic approach. *Leisure Science*, 39: 224-243.
- Bertelloni S, Maggio MC, Frederico G, Baroncelli G, Hiort O 2006. 17 β -Hydroxysteroid Dehydrogenase-3 deficiency: A rare endocrine cause of male-to-female sex reversal. *Gynecological Endocrinology*, 22(9): 488-494.
- Bless C, Higson-Smith C, Kagee A 2006. *Fundamentals of Social Research Methods*. Cape Town, South Africa: Juta & Co Ltd.
- Bowman C, Goldberg J 2006. *Care of the Patient Undergoing Sex Reassignment Surgery (SRS)*. Vancouver: Transgender Health Guide.
- Chan ZCY, Fung YL, Chien WT 2013. Bracketing in phenomenology: Only undertaken in the data collection and analysis process? *The Qualitative Report*, 18(59): 1-9.
- Chilland C 2003. *Trans-sexuality: Illusion and Reality*. London: Continuum.
- Cohen-Kettenis P, Pfäfflin F 2003. *Trans-Genderism and Inter-Sexuality in Childhood and Adolescence: Making Choices*. London: Sage Publications.
- Dallas D 2006. *Transgender Rights: Transgender Communities of the United States in the Late Twentieth Century*. Minnesota: University of Minnesota Press.
- Ekins R, King D 2006. *The Transgender Phenomenon*. Thousand Oaks: Sage Publications.
- Guest G 2012. *Applied Thematic Analysis*. Thousand Oaks: California: Sage Publications.
- Henning E, Gravett S, van Rensburg W 2005. *Finding Your Way in Academic Writing*. 2nd Edition. Pretoria: Van Schaik Publishers.
- Kuipers AJ 2005. *Anne's Meta-morphosis: A True Story*. Cape Town: Cameleon Books.
- Lawrence AA, Latty EM, Chivers ML, Bailey JM 2005. Measurement of sexual arousal in postoperative male-to-female transsexuals using vaginal photoplethysmography. *Arch Sex Behav*, 34(2): 135-145.
- Leinung MC, Urizar MF, Patel N, Sood SC 2013. Endocrine treatment of transsexual persons: Extensive personal experience. *Endocr Pract*, 19(4): 644-650.
- Lindell G 2008. Constitutional issues regarding same-sex marriage: A comparative survey - North America and Australasia. *Sydney Law Review*, 30(27): 28-30.
- Lindqvist EK, Sigurjonsson H, Möllermark C, Rinder J, Farnebo F, Lundgren TK 2017. Quality of life improves early after gender reassignment surgery in transgender women. *Europ J Plast Surg*, 40(3): 223-226.
- Lorenzi V, Earley RL, Grober MS 2006. Preventing behavioural interactions with a male facilitates sex change in female Bluebanded Gobies, *Lythrypnus Dalli*. *Behavioral Ecology and Sociology*, 59: 715-722.
- Markussen S 2017. The gender gap in entrepreneurship – The role of peer effects. *J Econ Behav & Organ*, 134: 356-373.
- Meyerowitz J 2002. *How Sex Changed: A History of Trans-Sexuality in the United States*. Massachusetts: Harvard University Press.
- Mocke NA 2006. *The Shipping Mistake*. Johannesburg: Lulu Publishers.
- Meyer-Bahlburg HF 2013. Sex steroids and variants of gender identity. *Endocrinol Metab Clin North Am*, 42(3): 435-452.
- Monstrey SJ, Ceulemans P, Hoebeke P 2011. Sex reassignment surgery in the female-to-male transsexual. *Semin Plast Surg*, 25(3): 229-244.
- Murad MH, Elamin MB, Garcia MZ, Mullan RJ, Murad A, Erwin PJ, Montori VM 2010. Hormonal therapy and sex reassignment: A systematic review and meta-analysis of quality of life and psychosocial outcomes. *Clinical Endocrinology*, 72(2): 214-231.
- Nielsen HB, Rudberg M 1994. *Psychosocial Gender and Modernity*. Copenhagen: Scandinavian University Press.
- Nakatsuka M 2012. Adolescents with gender identity disorder: Reconsideration of the age limits for endocrine treatment and surgery. *Seishin Shinkeigaku Zasshi*, 114(6): 647-653.
- Pfäfflin F, Junge A 2003. Sex Reassignment Thirty Years of International Follow-Up Studies after Sex Reassignment Surgery: A Comprehensive Review, 1961-1991. From <<http://www.symposium.com/ijt/pfaefflin/1000.htm>> (Retrieved on 3 April 2015).

- Smith YLS, Van Goozen SHM, Kuiper AJ, Cohen-Kettenis PT 2005. Sex reassignment: Outcomes and predictors of treatment for adolescent and adult transsexuals. *Psych Med*, 35(1): 89-99.
- Raffaini M, Magri AS, Agostini T 2017. Full facial feminization surgery: Patient satisfaction assessment based on 180 procedures involving 33 consecutive patients. *Plast Reconstr Surg*, 137(2): 438-448.
- Spack NP 2013. Management of transgenderism. *JAMA*, 309(5): 478-484.
- Stoncikaite I 2017. No, my husband isn't dead, but one has to re-invent sexuality: Reading Erica Jong for the future of aging. *Societies*, 7(11): 1-11.
- Stroumsa D 2014. The state of transgender health care: **Policy, law, and medical frameworks**. *American Journal of Public Health*, 104(3): e31-e38.
- Sutcliffe PA, Akehurst RL, Wilkinson A, Shippam A, White S, Richards R, Caddy CM 2009. Evaluation of surgical procedures for sex reassignment: A systematic review. *J Plast Reconstr Aesthet Surg*, 62(3): 294-308.
- Verma A 2010. *Multiple Forms of Violence in Maid-employer Relations in Singapore*. Master Thesis. Singapore: National University of Singapore.

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