



Literature Review

Men's Excessive Concern About Penile Size

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ARTICLE INFO

Received: July 06, 2021

Accepted: September 04, 2021

Published: June 30, 2022

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Keywords:

Body Dysmorphic
Disorder Human & Health
Penile Dysmorphism Disorder
Small Penis Anxiety

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Abstract

The dissatisfaction of men due to their penile size is found in a number of studies. Concerns can be focused on the penile length or width or even both, whether erect or flaccid. Men who are worried about the penile size also want to increase the size of the penis. Concerns about men's penile size are also increasing because they think normal penile size is what is shown in pornography. These worries can affect self-esteem, sexual function, and satisfaction, to physical and mental health. Small penis anxiety is an anxiety that arises when a man observes his flaccid penile size and feels concerned that his penile size is less than the normal size. In addition, this concern persists even though it has been refuted by clinical examination. Penile dysmorphic disorder is excessive self-concern, distress, and a preoccupation with trivial or even non-existent deficiencies in penile size and shape that can lead to impaired function. Until now, there have not been effective guidelines for managing patients with complaints of penile size. Some of the treatments that can be conducted are psychosexual counseling, cognitive behavioral therapy, the use of selective serotonin reuptake inhibitors, penile traction devices, and invasive procedures. Various modalities of therapy have been tried to overcome excessive concern about penile size. Yet, so far, no good results have been obtained. Thus, clear and effective guidelines are needed to make treatment can be carried out properly.

1. Introduction

Preoccupation about penile size in the male population is quite common.¹ Dissatisfaction due to penis size was found in 30% of respondents to the Global Online Sexuality Survey (GOSS) in 2010-2011, especially in flaccid conditions (40%) for the length (41%), thickness (15%), or both (44%).² Respondents who were dissatisfied with the erect penile size were 29%.² Several other researchers found that men who were dissatisfied with the size of their penis when flaccid was 66%-71.7%, while those who were not satisfied with the flaccid and erect condition were 28.3%-33%.³ Some researchers found that men who were satisfied with their penis size were 55%-58%, and only 0.2% of respondents wanted a smaller penile size.^{4,5} Studies showed that 85%-94% of respondents, who think that their penile size is small, overestimate the size of a normal penis.^{1,6} Study in 2002 found that all patients who complained about their penile size had normal penile measurements (above 2,5 percentile).¹

In various researches, 60%-64% of participants admitted that they began to worry about their penile size from childhood and adolescence because they compared the size with their friends' penises.^{1,7-9} Further, 37,3% of respondents in a study, said that their concern regarding the penile size appeared after seeing erotic images.¹⁰ Concerns can be focused on the penile length, circumference, or both, as well as the size when erect or flaccid.⁸ Concerns about penile size are often found in men who do not have permanent jobs, do not complete university education, have a lot of spare time, do not have a partner, and often use the internet.⁸ Less concern was found in men office workers with busy jobs, those who have graduated from college, are married, and have their interests in life.⁸

The research found that 68,3% of heterosexual men who are worried about their penile size measurement, wanted a bigger penile size.^{11,12} Data in Turkey showed that 67% of participants want to have a bigger penile measurement when erect even though they were satisfied with their penile size.⁷ Johnston, et al. found that men who were significantly dissatisfied with the size of their penis still wanted to enlarge their penis even though they had a normal penile measurement.^{11,13} Besides, Lever, et al. found that 45% of heterosexual men wanted a bigger penile size.⁵

A study found that shorter penile length in men who are concerned about their penile size compared to men who are not worried.² Thus, penile size concerns among men should be taken seriously.² The increasing concern and desire to seek medical solutions for the inadequate penile

size can also be seen in the increasing number of patients seeking andrology consultations.^{7,14}

The objective of writing this literature review article is to find out the pornography's effect on penile size dissatisfaction, normal penile size, consequences of excessive concerns about the penile size, mental disorders that can arise, also treatment and prevention that can be conducted. The studies included in this review are related to penile size, small penis anxiety, penile dysmorphophobia disorder, and body dysmorphic disorder.

2. Review

The Effect of Pornography on Dissatisfaction with Penile Size

Men's concern about the size of their penis is also increasing because they think that normal penis size is what is shown in pornography.^{7,15} While watching sexual content, men tend to compare their penile size with those of pornographic actors, which then makes them feel like they have a small penile size.^{13,16} Studies found that 36%-41% of teenage boys start worrying about their penile size after watching pornography.^{7,17} There is a relation between dissatisfaction with penile size and exposure to pornography.¹⁷ However, Peter and Valkenburg's research in the Netherlands and research in Australia did not find any such relation.^{18,19,20} Men's misconceptions about women's preference for penis size can also be caused by pornography, which displays women's exaggerated positive responses to the enormous penile size.¹³ The increasing number of pornographic images with very large penises accompanied by the emergence of advertisements for penile enlargement tools or clinics will make this concern more and more in the future.^{1,7}

Consequences of Excessive Worrying About Penile Size

A man's perception of his penile size in comparison to the size of someone else's is a more crucial issue than the size of the penis itself.²¹ Distress can arise from worries about having a penile size that is smaller than normal.^{22,23} These excessive concerns can affect self-esteem, sexual function, and satisfaction, to physical and mental health.^{13,24} This dissatisfaction can lead to psychological disorders such as impaired perception of self-images and self-confidence.² The GOSS study found that men who were dissatisfied with their penile measurement had a higher prevalence of erectile dysfunction than men who were satisfied with their penile measurement.²

Lifelong premature ejaculation can also occur in men who are concerned about the size of their penis.²⁵ Psychopathological symptoms such as anxiety, mood disorders, and low quality of life can occur in men who are worried about their penile size.²⁶

Negative perspectives, rejection, and humiliation by others (in the locker room or with sexual partners) are feared by men due to the size of their penis.²⁷ Thus, interactions with sexual partners and co-workers can also be negatively affected.^{7,15} Even sexual dysfunction in women can also arise from a man's dissatisfaction with his penile size.²

Normal Penile Size

A penis with normal anatomy but has stretched length measurement of less than 2 or 2,5 standard deviations from the mean for age is considered abnormally small.^{6,28,29} Until now, epidemiologic studies for normal penis size are lacking.⁶ Data from various countries (United States, Nigeria, Israel, Italy, Turkey, Greece, Jordan, Iran, and India) on 12,257 participants, aged 17-83 years, from 1948-2011, showed that an average flaccid penile length (FPL) is 8,64cm, stretched penile length (SPL) is 12,87cm with penile circumference is 9,11cm.⁷ A systematic review conducted by Veale, et al., found that the average FPL was 9,16cm, the SPL was 13,24cm, and the EPL was 13,12cm.³⁰

Small Penis Anxiety (SPA) and Penile Dymorphophobia Disorder (PDD)

Excessive concern about the measurement of the penis can lead to SPA.²⁵ SPA is excessive anxiety, dissatisfaction, and feelings of shame that arise when a man observes his flaccid penile size and feels concerned because his penile size is felt to be less than the normal size, which persists despite clinical examination refuting that the penile size is normal.^{22,27,31,32} The epidemiology of this condition is not known.³³ Few theories are proposed regarding this condition such as impaired neurological development (tactile stimulation and perineal sensation), dysfunction in the parietal lobe (association areas), and other contributing factors (cognition and disgust effect also cognition of parts belonging to self).¹⁰

Normal penile measurement and adequate sexual and voiding function were found in 98% of men who were concerned about their penile size.^{22,30,31} Overestimation of the average flaccid penile length of others and assuming that their flaccid penile length is much smaller, is often found.⁵ Negative evaluation from sexual partners is

also a concern for men with SPA.²⁸ Veale, et al. found the "jelqing" procedure (forcing blood flow to the tip of the penis through squeezing and stroking movements) performed by 80% of men with SPA.³² Men with SPA are also found to use weights on the penis in an attempt to lengthen the penis.³² Significant emotional difficulties and behavioral disturbances can make SPA part of psychosis or obsessive rumination.³¹ Body dysmorphic disorder (BDD)'s criteria, such as preoccupation with penile size, degree of distress, and impaired function, are not met in SPA conditions.⁵

PDD or penile dysmorphic disorder, based on the diagnostic and statistical manual for Mental Disorder fifth edition, is incorporated into somatoform disorders (BDD) described by excessive self-anxiety or embarrassment, distress, and preoccupations (at least one hour per day) with trivial or even non-existent deficiencies (imagination) in their physical appearance (including penile size and shape) that can lead to clinically visible functional disturbances (sociopathic disorders, occupancy, and other important functions).^{14,26,28,31,32} In the United States, BDD are affecting 2,4% of adult, and slightly more common in women than in men.³⁴ For men with BDD, concern about their genital appearance is more common than in women.^{29,34} Penile size is a significant and unique phenomenon in men with BDD.³² Unfortunately this condition only has very few studies.³⁴ Men with this condition continuously overestimate another person's penile size and underestimate the size of their penis.³¹ To respond to their concerns, patients usually show repetitive habits such as threat detection (checking or comparing sizes) accompanied by evasion or camouflage (changing posture so that the phallus is not visible), which is a behavior of seeking safety that is often done.^{14,32} Showing a flaccid penis in public (locker room) or to a sex partner (flaccid or erection) is an embarrassing situation.³² Onset can occur in adolescence, chronic, and can trigger the idea of even carrying out suicide.³² Shyness, psychopathological symptoms (low mood and general anxiety), as well as relationship disorders, occur more severely in men with PDD than men with SPA.^{14,32} Disorders in daily activities that can arise are avoiding relationships, intimacies, and personal activities (swimming and exercise), also there are comorbidities such as depression, obsessive compulsive disorder, somatic delusions, social phobias, panic disorders, addiction, and sexual identity disorder.^{3,5} Study in 2002 found that dysmorphophobia was the cause of the inability to evaluate the proportion of the genital, because all

of the participants had normal penile measurements.¹ When compared with men with micro-penises, dysmorphic patients are more likely to request penile augmentation procedures.³⁵

Lotions, pills, sports, and penis lengthening tools which have not been proven yet and offered on the internet, are widely accessed by men who suffer from these conditions.⁵ The study found average flaccid and erect penile length in men with SPA and PDD is smaller than the control group.^{5,8} Patients with SPA and PDD usually have a penile measurement within normal limits and still need to be distinguished from micropenis conditions.^{5,14,22} A small percentage of patients with PDD are found to have micropenises, so patients with small penile size complaints can have a variety of causes.³⁶ SPA and PDD will cause sexual, social, and occupational dysfunction, depressive episodes, and a decreased quality of life.^{22,31} Another psychiatric condition associated with the phallus is genital retraction syndrome, which is an understanding of men who believe that the penis is getting smaller and will disappear, although no changes are found in the size of the penis.^{3,37}

Management

During anamnesis of the medical history and clinical examination, a structured assessment of the patient's anxiety condition, as well as a careful objective examination of the penile measurement, should be performed.^{1,36,38} Psychological, psychiatric, and psychosexual evaluations, especially in search of other dysmorphic ideas and mental disorders, should be conducted and urological evaluations are required before deciding on surgical procedures.^{14,36} To date, for the treatment of patients with complaints about the size of their penises, there has been no effective guidelines.²⁵

Patients who complain of a small penile size require intensive psychosexual counseling.^{36,38} Counselling about the penile size can be done using a nomogram for providing evidence, which can show the patients the normal range of penile measurement, as well as where their penile size is located on the nomograms.^{1,4,30} Successful reassuring with nomograms to convince men of their normal penile size, was found to be up to 70%-86%.^{1,3,28} Erect penile size is more considered when providing education on the normal size of the penis to the patient.³⁹ It is important to educate and counsel patients individually about penile size variations, although there is a tendency for this education to be unsuccessful in patients with below-average penile sizes.^{5,40} A man who has a normal penile size and suffers from a misconception of the size of his penis for many

years will not recover simply by saying that the size of his phallus is normal.²⁵

In PDD, the administration of cognitive behavioral therapy and psychological support is quite helpful.³⁶ This therapy has important components like exposure, ritual prevention, mirror retraining, mindfulness, and cognitive restructuring. This therapy can also be used in SPA.³⁴ But there is not much evidence or standardization of psychological interventions in men with SPA and PDD conditions.^{27,36} A total of 3,6% of patients still chose surgical procedures despite counseling, but most patients chose to avoid intervention.^{3,38}

A wide range of promoted drug and supplement products can increase penile size, but they lack scientific evidence and are not approved by the Food and Drug Administration (FDA), and they may contain harmful ingredients.¹⁴ Some other methods of increasing penile size do not yet have adequate scientific evidence, such as weight use, botulinum toxin, and physiotherapy.³⁶ The administration of additional testosterone cannot increase the size of the penis, because after adulthood, androgen receptors are no longer expressed.⁴¹ Fluoxetine, a selective serotonin reuptake inhibitors, shows improvement in symptoms of PDD both with and without delusional, however further investigations are still required for using it routinely.¹⁴ For extreme anxiety, Buspirone can be used.¹⁰ Delusional BDD can be treated with antipsychotic medication.¹⁰

Another therapeutic option is the use of a penile traction device to extend the penis non-invasively, working by stretching the penile tissue through careful mechanical attraction to increase the length and thickness of the penis.^{31,40,42} The penile traction device is safe to use for PDD patients of various penile sizes.⁴⁰ While using a vacuum erectile device temporarily increases blood to the corpus cavernosum, the long-term use for increasing penile length or thickness is still debated.¹⁴

Invasive procedures that can be done are penile elongation or lengthening procedures, such as liposuction, suprapubic lipectomy, or panniculectomy limited to men with significant suprapubic fat (obesity condition) to obtain a visual lengthening effect.^{7,31,40} Suspensory ligament release or ligamentolysis can be used to lengthen the penis by 1-3cm, this procedure causes the corpus cavernous to move forward, causing the flaccid penis to appear elongated and more dangling, even though its original size does not increase.^{7,31,40,43} The V-Y advancement flap with or without a silicone sheath and a radial artery-based forearm free flap is an invasive surgical procedure

that can also be used as a penile elongation procedure.^{40,42} Penile augmentation, which is the procedure of augmentation of the penis, is an attempt made by an individual to make his penis larger and longer to satisfy his sexual desire or his partner without changing the function of the penis.⁴⁴ To increase the thickness of the penis, it can use injectable materials, lipo injection, dermis grafts, venous grafts for corpus cavernous, temporalis fascia transfer, and the use of autologous fibroblasts lining the biodegradable frame.^{31,32,40} Psychiatric evaluations need to be conducted before performing surgically penile elongation procedures in men with normal stretched penile length.³¹

The injection and surgical procedure are the last steps that can be performed after all other conservative measures fail, which is expected to improve discomfort, and improve the self-esteem and quality of the patient's sexual life.^{35,38,43} But usually, the expected outcome for the patient from the interventional procedure is less realistic, since the patient's perception of the penile size is also less realistic.³⁵ In conditions where the patient with a short penile length and realistic expectations of postoperative results is preferred for the surgical procedure.³⁶ As well as the need to inform patients that the available invasive procedures are still in experimental corridors.²⁵

In BDD patients, interventional measures are recommended to be avoided.³⁸ Cosmetic therapy, performed on BDD patients for their physical appearance, cannot provide benefits where there is no improvement, even a worsening of symptoms.^{3,14,36} Surgery to correct deficiencies in the penis can even be performed alone by patients with BDD.³²

Prevention

To avoid false myths and concepts, and so that young men do not get incorrect information from friends or untrusted websites, it is necessary to hold sexual education programs.⁸

3. Summary

Concerns about penile size occur among men, and if they are too excessive, these concerns will severely interfere with the quality of these men's life and cause a variety of psychiatric problems. Various therapeutic approaches have been tested to overcome excessive anxiety over penile size. Nevertheless, up until now, the results of various studies do not show good output and there are no standard guidelines for managing these conditions. Hence, it is necessary to have clear and effective

guidelines, so that the management of men with excessive anxiety about their penile size can be done well.

Acknowledgement

We would like to thank Mitra Keluarga Kelapa Gading Hospital and Bunda Mother and Child Hospital for the support for this article.

Authors' Contributions

All authors have contributed to the final manuscript. The contribution of each author as follow: collected the data, drafted the manuscript and designed the figures, devised the main conceptual ideas and critical revision of the article. All authors discussed the results and contributed to the final manuscript.

Conflict of Interest

The authors state there is no conflict of interest.

Funding Information

This work does not receive any funding.

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