Effect of relaxation on responses to erotic stimuli

No registrations found.

Ethical review Positive opinion **Status** Recruiting

Health condition type -

Study type Interventional

Summary

ID

NL-OMON29103

Source NTR

Brief titleRelaxStudy

Health condition

Sexual dysfunction

Sponsors and support

Primary sponsor: LUMC

Source(s) of monetary or material Support: Stimuleringsfonds creative industrie

Intervention

Outcome measures

Primary outcome

Pelvic floor activity assessed by vaginal surface EMG, and experience of non-genital tactile stimulation assessed by self-report of intensity, pleasurableness and sensuality of sensation.

Secondary outcome

Self-reported mental and physical relaxation, heart rate, genital sexual arousal, and subjective sexual arousal

Study description

Background summary

In several theories of female sexual function it is assumed that stress inhibits sexual responding, while relaxation facilitates it. It is thought that mental relaxation enables optimal processing of visual, auditory, or tactile sexual stimuli, which can instigate sexual arousal, reflected in feelings of sexual excitement, and in increases in genital blood flow. At the same time, physical relaxation, counteracting inhibitory central nervous system influences and promoting relaxation of the pelvic floor muscles, is thought to help in optimal blood flow to the genitals during sexual arousal. Laboratory studies on stress and sexual functioning have demonstrated significantly lower genital responses in women with higher levels of chronic stress, and pointed to possibly optimum levels of central nervous system activity for sexual responding. Also, studies showed increased pelvic floor muscle activity during anxiety states, and provided initial evidence for an association of higher pelvic floor activity and lower levels of vaginal blood flow. Thus, taking together, there is increasing empirical evidence for negative effects of stress on female sexual functioning.

In line with the evidence for negative effects of stress, many treatments for female sexual dysfunction, such as treatments for sexual arousal and desire, orgasmic, and sexual pain disorders include interventions aimed at enhancing mental and physical relaxation, including relaxation of the pelvic floor. These interventions vary from instructed relaxation to mindfulness exercises. Research directly testing the potentially beneficial effects of relaxation on female sexual response is however very scarce. Recently, initial studies have observed facilitating effects of relaxation, but more research is needed. For the present research project we collaborate with an industrial design company that developed several tools aimed at the facilitation of female sexual health. One of these tools is a biofeedback tool aimed to facilitate general relaxation, and another tool is a 'brush' for gentle non-genital self-caressing. Using these tools and psychophysiological research methods we will investigate in healthy sexually functional women the effect of relaxation (with the help of the bio-feedback tool) on pelvic floor activity, and on the experience of non-genital tactile stimulation (using the brush), as well as the association of relaxation level with levels of sexual arousal and pleasure in response to visual erotic stimulation.

Study objective

- 1. Guided relaxation using a breathing biofeedback tool will result in less pelvic floor muscle activity, and in more intense and pleasurable experience of gentle non-genital tactile stimulation compared to quietly laying down.
- 2. Higher levels of mental and physical relaxation will be associated with stronger genital and subjective sexual arousal responses to erotic film

Study design

Single session with continuous (physical response) or repeated (self-report) assessment of the primary and secundary outcomes in experimental blocks with 1. relaxation instruction with the feedback tool, 2. quietly lying down instruction, 3. non-genital tactile stimulation, and 4. erotic film viewing

Intervention

Single session of guided relaxation using a breathing biofeedback tool

Contacts

Public

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Scientific

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Eligibility criteria

Inclusion criteria

- Female
- Age > 18 and < 46 years.
- No sexual complaints for at least one year
- Have been sexually active including intercourse, during the last year.

Exclusion criteria

- Unable to speak, understand and write the Dutch language
- Homosexual orientation (because of the heterosexual stimulus material)
- Pregnancy or lactation
- Current serious affective, or psychotic problems

- Having undergone a radical hysterectomy or prolapse surgery
- Current or recurrent use (less than 4 weeks before participation) of medication that may affect sexual response. To determine possible sexual side-effects the latest version of the 'Farmacotherapeutisch kompas' will be used.
- Current or previous disorders of the genitals that may influence the sexual response or the measurement of the response.
- Other medical disorders that may influence the sexual response or the measurement of the response.

Study design

Design

Study type: Interventional

Intervention model: Other

Allocation: Non controlled trial

Masking: Open (masking not used)

Control: N/A, unknown

Recruitment

NL

Recruitment status: Recruiting
Start date (anticipated): 03-05-2021

Enrollment: 50

Type: Anticipated

IPD sharing statement

Plan to share IPD: Undecided

Ethics review

Positive opinion

Date: 23-06-2021

Application type: First submission

Study registrations

Followed up by the following (possibly more current) registration

No registrations found.

Other (possibly less up-to-date) registrations in this register

No registrations found.

In other registers

Register ID

NTR-new NL9563

Other METC Leiden Den Haag Delft : METC Leiden Den Haag Delft P20.081

Study results