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Sexual Dysfunction in MS

A Practical Guide for Nurses

Edna Astbury-Ward
RGN, MSc (Sexual Medicine)

MS NURSE TOOLKIT

Contents:

Background to sexual dysfunction

Multiple sclerosis (MS) is a chronic, unpredictable and complex disease. The progression of disease in both symptoms and severity varies greatly between individuals and even within individuals on a daily basis. MS often affects sexually active young adults. The progression of MS may lead to sexual dysfunction in some patients, though not necessarily all.[1]

Sexual dysfunction in MS manifests in a number of ways (Table 1).

	Symptoms
In both sexes	Decreased or loss of libido Decreased or unpleasant genital sensations Diminished capacity for orgasm
In men	Difficulty achieving or maintaining an erection Decreased or loss of ejaculatory force or frequency
In women	Decreased vaginal lubrication Loss of vaginal muscle tone Diminished clitoral engorgement

Table 1. Symptoms of sexual dysfunction that may be experienced by patients with MS.[2]

There are a number of studies—mostly based on patient questionnaires—which aim to establish the prevalence of sexual dysfunction in people with MS.[2–4] It is estimated that approximately 85% of men with MS report at least occasional sexual problems. Data for women tend to be more variable; it is estimated that 56–74% of women with MS report problems. The most frequently occurring symptom in men tends to be erectile dysfunction. In women, loss of libido and changes in vaginal sensation and lubrication are most commonly reported.[2]

Sexual responses depend upon the relay of messages from the brain to the genitalia via the spinal cord. The lesions typical of MS that occur in the spinal cord can affect these genital–neurological pathways, causing problems such as erectile and ejaculatory difficulty in men and diminished clitoral engorgement in women. Lesions in the brain may be capable of causing changes in libido and may also alter the sensation of orgasm.[5]

Having MS can also affect psychosocial factors which govern patients' sexual expression. Patients may often experience loss of dignity, loss of personal identity, depression, anxiety and dependency. They

"Around 85% of men and 56–74% of women with MS report at least occasional sexual problems"

may also struggle to cope with other symptoms such as fatigue and sensory changes. All of these factors influence libido and sexual motivation of people with MS.[5]

Foley and Werner[2] divided sexual dysfunction into three categories; primary, secondary and tertiary (Table 2). This framework is useful when describing sexual dysfunction in MS, although in reality sexual dysfunction is a combination of these factors and it may be difficult to separate them.[1]

"Sexual dysfunction can be divided into three categories: primary, secondary and tertiary"

Category	Description	Symptoms
Primary sexual dysfunction	Directly caused by lesions in the spinal cord or in the brain affecting genital-neurological pathways	• Decreased or loss of libido • Decreased or unpleasant genital sensations • Diminished capacity for orgasm • Difficulty achieving or maintaining an erection • Decreased or loss of ejaculatory force or frequency • Decreased vaginal lubrication • Loss of vaginal muscle tone • Diminished clitoral engorgement
Secondary sexual dysfunction	Other neurological symptoms that may affect the sexual functioning of an individual	• Bladder and bowel problems • Fatigue • Spasticity • Muscle weakness • Body or hand tremors • Impairments in attention and concentration • Non-genital sensory changes
Tertiary sexual dysfunction	Disability-related psychosocial influences on sexual functioning	• Loss of self-esteem • Demoralisation • Depression • Mood swings • Emotional adjustment

Table 2. The categories of sexual dysfunction in patients with MS.[2]

Assessment of sexual dysfunction in patients with MS and the role of the MS nurse

Sexual dysfunction is a silent symptom of MS and tends to be overlooked by healthcare professionals. It is important to recognise the detrimental effect that sexual dysfunction has on quality of life and that the MS nurse can play a vital role in helping patients to cope with this sensitive issue.[1]

Assessment of sexual dysfunction is not straightforward due to its personal and sensitive nature. Patients are often reluctant to talk to healthcare professionals about their problems, and likewise, healthcare professionals may also feel embarrassed, or that they lack the necessary expertise required to deal with such problems.[1]

Routine assessment of sexual dysfunction as part of the overall neurological examination will help nurses to introduce more open communication with their patients. The PLISSIT model may help to establish communication with MS patients in order to fully discuss any sexual dysfunction they may be experiencing (Figure 1). This model is not only useful as a framework for discussion but also helps nurses legitimise sexuality as an appropriate topic for open communication.

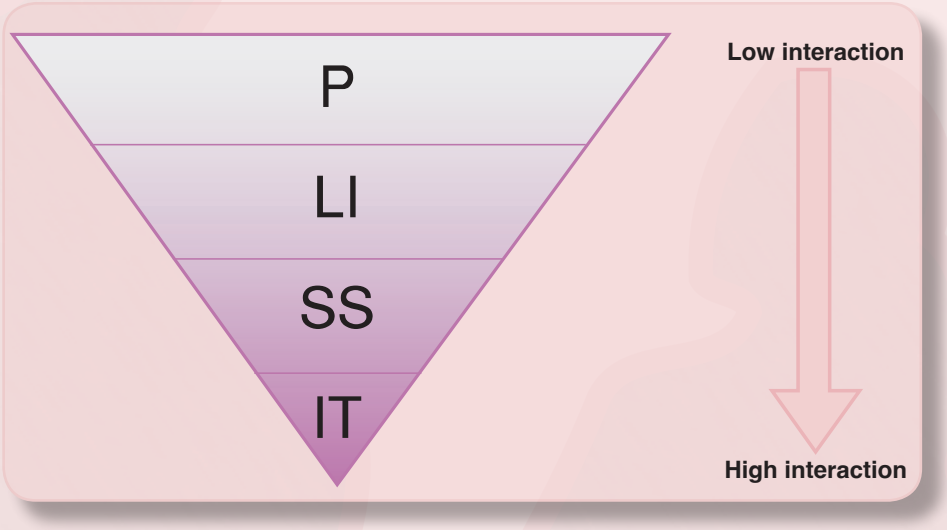


Figure 1. The PLISSIT model.[6]

"Routine assessment of sexual dysfunction as part of the overall neurological examination will help nurses to introduce more open discussion with their patients"

Healthcare professionals should aim to work from the top of the model to the bottom. The depth of interaction (increasing nearer the top of the model) will depend on the skill and experience of the healthcare professional involved. The stages are given in Table 3.

Level of interaction		Description
P	Permission Giving	Reassures the patient that their problem is not abnormal, and gives them permission to ask questions, or raise specific problems/concerns.
LI	Limited Information	Gives appropriate information to dispel myths or misconceptions that may be concerning the patient.
SS	Specific Suggestion	Involves action steps, such as the suggestion of appropriate books and/or literature, for management of the problem.
IT	Intensive Therapy	Appropriate when the patient appears to have a complex emotional or psychological problem. This stage may necessitate referral to a specialist.

Table 3. The levels of the PLISSIT model.

The model also represents the proportion of healthcare professionals able to advise at any given level. For example, a much greater number of healthcare professionals will be comfortable at the 'Permission Giving' level of the model than the 'Intensive Therapy' level. For this reason, the 'P' level is much larger than the 'IT' level.

"During assessment it is important to ensure patients are comfortable and at ease before beginning questioning"

During assessment it is important to ensure patients are comfortable and at ease before beginning questioning. When asking patients questions about sexual function, sensitive but open-ended questions are helpful. Some examples are given below.

"Can you tell me how MS affects your relationships?"

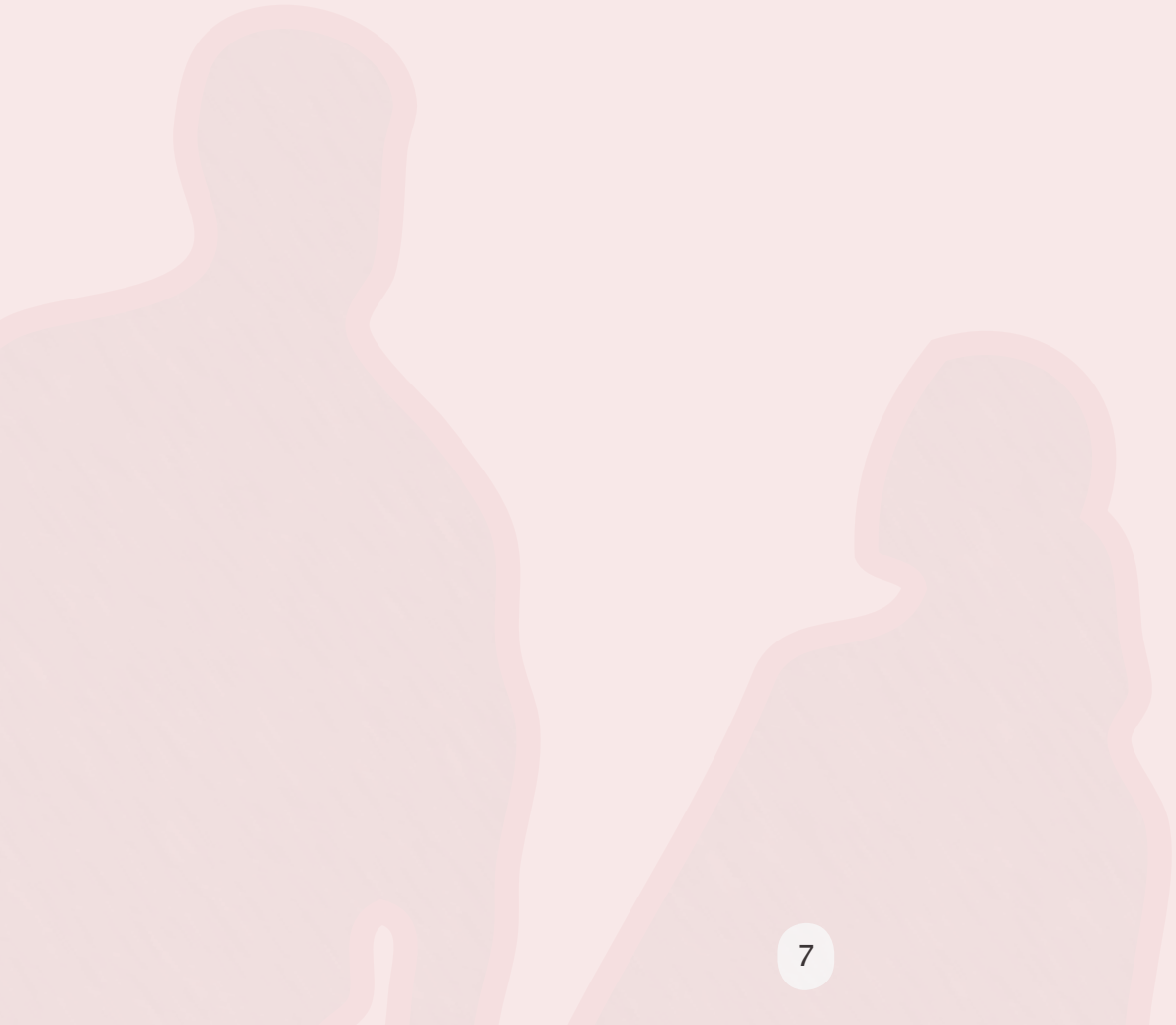
"Can you tell me of any ways in which you feel your sex life has been affected by your MS?"

"Has your sex drive changed in any way?"

A structural assessment of sexual dysfunction by the MS nurse is essential to determine if the patient is experiencing primary, secondary or tertiary dysfunction, or a combination of all three.[1]

A useful tool available to the MS nurse when assessing sexual dysfunction in their patients is the *Multiple Sclerosis Intimacy and Sexuality Questionnaire 19* (MSISQ-19; Figure 2). This is a questionnaire composed of 19 questions that ask the patient to rate how various symptoms of their MS have interfered with their sexual satisfaction or activity over the last six months.[7] Asking patients to complete this questionnaire gives a good idea of the extent of their problems (as the response is rated on a scale of 1–5) and the relative contribution of primary, secondary and tertiary sexual dysfunction.

"The Multiple Sclerosis Intimacy and Sexuality Questionnaire 19 is a useful tool for assessing sexual dysfunction"



Multiple Sclerosis Intimacy and Sexuality Questionnaire 19

Instructions: In order to better understand the impact of Multiple Sclerosis on intimacy and sexuality, this 19-item questionnaire asks you to rate how various MS symptoms have interfered with your sexual activity or satisfaction over the last six months. Questions may be answered by placing a check or any other mark in the square located next to the question and below the appropriate number. There are no right or wrong answers. If you are unsure how to answer a question, please choose the best answer you can.

Over the last six months, the following symptoms have interfered with my sexual activity or satisfaction:

1 = Never 2 = Almost never 3 = Occasionally 4 = Almost always 5 = Always

	1	2	3	4	5
1. Muscle tightness or spasms in my arms, legs, or body	☐	☐	☐	☐	☐
2. Bladder or urinary symptoms	☐	☐	☐	☐	☐
3. Bowel symptoms	☐	☐	☐	☐	☐
4. Feelings of dependency because of MS	☐	☐	☐	☐	☐
5. Tremors or shaking in my hands or body	☐	☐	☐	☐	☐
6. Pain, burning, or discomfort in my body	☐	☐	☐	☐	☐
7. Feeling that my body is less attractive	☐	☐	☐	☐	☐
8. Problems moving my body the way I want during sexual activity	☐	☐	☐	☐	☐
9. Feeling less masculine or feminine due to MS	☐	☐	☐	☐	☐
10. Problems with concentration, memory, or thinking	☐	☐	☐	☐	☐
11. Exacerbation or significant worsening of my MS	☐	☐	☐	☐	☐
12. Less feeling or numbness in my genitals	☐	☐	☐	☐	☐
13. Fear of being rejected sexually because of MS	☐	☐	☐	☐	☐
14. Worries about sexually satisfying my partner	☐	☐	☐	☐	☐
15. Feeling less confident about my sexuality due to MS	☐	☐	☐	☐	☐
16. Lack of sexual interest or desire	☐	☐	☐	☐	☐
17. Less intense or pleasurable orgasms or climaxes	☐	☐	☐	☐	☐
18. Takes too long to orgasm or climax	☐	☐	☐	☐	☐
19. Inadequate vaginal wetness or lubrication (women)/difficulty getting or keeping a satisfactory erection (men)	☐	☐	☐	☐	☐

Scoring

Primary sexual dysfunction	items = 12, 16, 17, 18, 19
Secondary sexual dysfunction	items = 1, 2, 3, 4, 5, 6, 8, 10, 11
Tertiary sexual dysfunction	items = 7, 9, 13, 14, 15

Any item scoring "4" or "5" should be discussed with your MS healthcare provider.

Figure 2. The MSISQ-19.[7]

Assessment of sexual dysfunction in MS patients is divided into four stages:

1. Determine the nature of sexual problems
2. Gather background information
3. Investigate any contributing factors
4. Determine the relative contribution of primary, secondary and tertiary sexual dysfunction.

1. Determine the nature of sexual problems

- Are the sexual difficulties a new symptom or do they pre-date the MS?
- Are sexual symptoms continuous or intermittent?

2. Gather background information

- Patients may be asked to complete a questionnaire such as the MSISQ-19.
- Establish the importance of sexual activities within the patient's relationship, as maintaining intimate relationships may not be a priority.
- Assess for difficulties within the relationship itself.
- Examine the patient's sexual history, looking at both past and present sexual behaviours and sexual relationships.
- Establish the date of the last successful intercourse.
- Assess males for performance anxiety.
- Identify existing coping behaviour and management strategies (if any).

"Assessment of sexual dysfunction is divided into four stages"

"Good communication between the healthcare professional and the patient is paramount to establishing a comfortable patient dialogue"

3. Investigate any contributing factors

These can include:

- Relapse
- Other concurrent conditions, such as:
  - Diabetes
  - Arterial disease (particularly hypertension)
  - Renal conditions
  - Thyroid disease
- Side effects of medications:
  - Antidepressants
  - Anticonvulsants
  - Antimuscarinics
  - Antihypertensives
- Lifestyle:
  - Smoking (tobacco and/or cannabis)
  - Alcohol consumption
  - Obesity.

4. Determine the relative contribution of primary, secondary and tertiary sexual dysfunction

- Ask direct questions relating to the symptoms of primary, secondary and tertiary dysfunction as given in Table 2.

Good communication between the healthcare professional and the patient is paramount to establishing a comfortable patient dialogue. This interaction should be relaxed and unhurried. If it is found that the patient is responding well to initial questioning and there is insufficient time to complete an assessment, another appointment is advisable in which sexual issues that the patient is experiencing may be discussed in full.

Management of sexual dysfunction in patients with MS

Aims of management

The aims of management of sexual dysfunction in patients with MS are numerous. They include:

- Improved sexual functioning and performance (improved by a combination of pharmacological and non-pharmacological methods)
- Improved communication between the couple involved
- Improved education of the patient and their partner in terms of sexual functioning
- Improved self-esteem of the patient concerned.

Non-pharmacological treatment

There are a number of non-pharmacological treatment options available for the management of sexual dysfunction in people with MS. These include:

- Education
- Communication
- Exercise and sexuality
- Devices and products
- Surgery.

Education

Education of the patient and their partner is an important process. It helps patients and their partners to cope with the distress and physical practicalities of sexual dysfunction. Informing patients of what to expect and any other related issues relating to their sexual function is only of use when helpful solutions are also offered.

"Education of the patient and their partner is an important process"

"Healthcare professionals can be beneficial to many patients with sexual dysfunction"

Communication
Open communication and talking to a knowledgeable healthcare professional can be beneficial to many patients with sexual dysfunction. Expression of anxieties and concerns in a safe therapeutic encounter is an important aspect of holistic care. MS specialist nurses can provide this much-needed education and explanation to their patients, thus providing some of the necessary support.

Communication is vital in any relationship, particularly where there are added complications such as sexual dysfunction. Encouraging open communication between the patient and their partner can help to restore intimacy between the couple.

Devices and products
Men
If pharmacological treatments for erectile dysfunction (the inability to achieve or maintain a penile erection sufficient for satisfactory sexual performance) are unsuccessful, there are a number of non-pharmacological options which may be tried.

Vacuum constriction devices/pumps are one such option. They are either battery or manually powered devices that enable the patient to achieve and maintain an erection for up to 30 minutes. An erection is achieved by use of the pump. The erection is subsequently maintained by use of a constriction ring which is placed around the base of the penis. It is important to remove the constriction ring after 30 minutes to ensure that there is no damage to penile tissues. The advantages of vacuum devices are that they can be used frequently and they do not involve the patient taking tablets. However, they can be cumbersome and some couples complain that they limit spontaneity. It is therefore important that couples are carefully selected and well-informed prior to recommendation of this device.

Women
Women who suffer from decreased vaginal lubrication can use an artificial replacement available from most chemists. Silicone-based lubricants are best as they mimic the natural viscosity of vaginal secretions. Women who suffer from decreased genital sensation or decreased frequency of orgasm may find the use of clitoral vibrators helpful, though caution is required if genital sensation is severely reduced as minor localised trauma can occur.

Surgery

Surgery for erectile dysfunction is only considered as a last resort, but it does have a number of advantages. Insertion of a penile prosthesis is only considered after appropriate evaluation by a consultant urological surgeon. There are two basic types: inflatable and non-inflatable (malleable) prosthesis. Sensitive pre-operative counselling and information is required. Infection, erosion and occasional mechanical failure are the most common disadvantages of penile prosthesis.

Other non-pharmacological interventions

Pelvic floor exercises may help to increase vaginal muscle tone. Other techniques include body mapping. This is where the patient's partner maps out areas of pleasure and discomfort, or where there may be sensory loss. This may help to increase libido and facilitate communication between the couple. Experimentation with different sexual positions may also increase sensation. MS nurses can give this advice but it is important to remain aware that some patients may require specialist sexual advice or relationship counselling.

Pharmacological treatment

Phosphodiesterase type-5 inhibitors

The available medications aimed at men are designed to treat erectile dysfunction. The available treatments (Table 4) are all phosphodiesterase type-5 (PDE5) inhibitors, which work by increasing blood flow to the penis during sexual stimulation.

Generic name	Brand name
Sildenafil (as citrate)	Viagra®
Tadalafil	Cialis®
Vardenafil	Levitra®

Table 4. Available treatments for erectile dysfunction.

To date there are no effective pharmacological options for the treatment of sexual dysfunction in women. A small-scale study undertaken by Dasgupta *et al* in 2004 investigated the efficacy of sildenafil in the treatment of sexual dysfunction in 19 women. They found that sildenafil had a positive effect on vaginal lubrication in these women but it had no significant effect on quality of life.[8] It is important to note that sildenafil is not indicated for women.

"The available medications aimed at men are designed to treat erectile dysfunction"

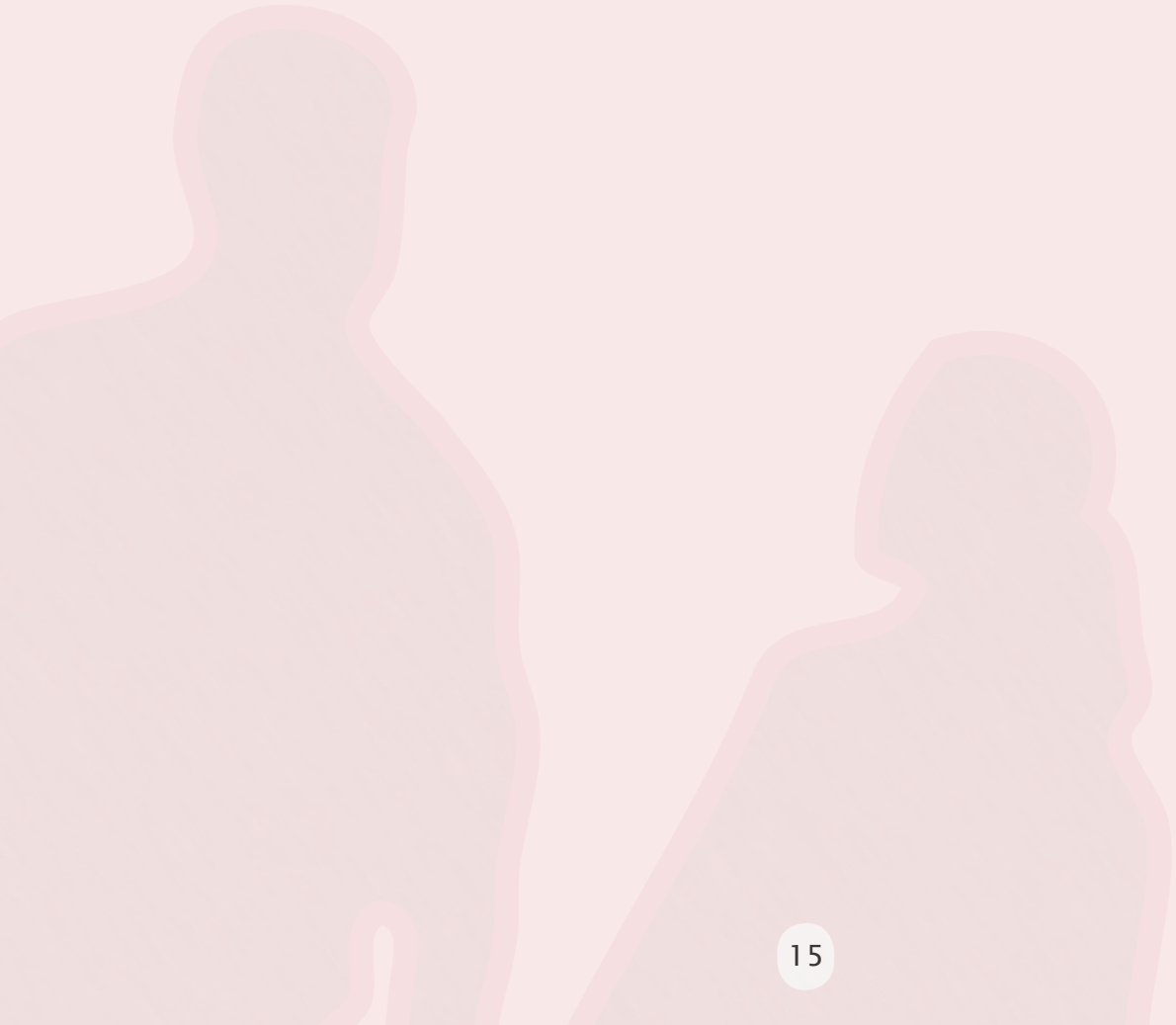
Intracavernosal injections
If PDE5 inhibitors are unsuccessful in achieving erection, penile injections are a good alternative. Intracavernosal injections involve the injection of prostaglandin E_1 (PGE_1) into the cavernous tissue (shaft) of the penis. PGE_1 induces erection by relaxing smooth muscle and dilating blood vessels in the penis, leading to increased blood flow.

The patient is taught by a specialist nurse or doctor how to self-inject using small quantities of the drug. Unlike the PDE5 inhibitors, intracavernosal therapy does not require sexual stimulation for erection to occur and it is efficacious in up to 80% of men.[9] However, many men and their partners are reluctant to experiment with this as it involves a penile injection 10–15 minutes prior to intercourse.

"If PDE5 inhibitors are unsuccessful in achieving erection, penile injections are a good alternative"

Conclusions

Sexual dysfunction is a highly distressing aspect of MS that is frequently overlooked even though it can have a significant detrimental effect on quality of life. Following assessment, MS specialist nurses can develop an understanding of a patient's sexual dysfunction and thus limit misunderstandings that patients or their partners may have. They can suggest appropriate treatments (either non-pharmacological or pharmacological) and recommend referral of patients to the correct healthcare professional when necessary. By introducing routine assessment of sexual dysfunction into standard clinical examinations, MS specialist nurses can help to educate, support and build confidence in their patients, thus greatly improving quality of life for patients and their partners.



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Further reading

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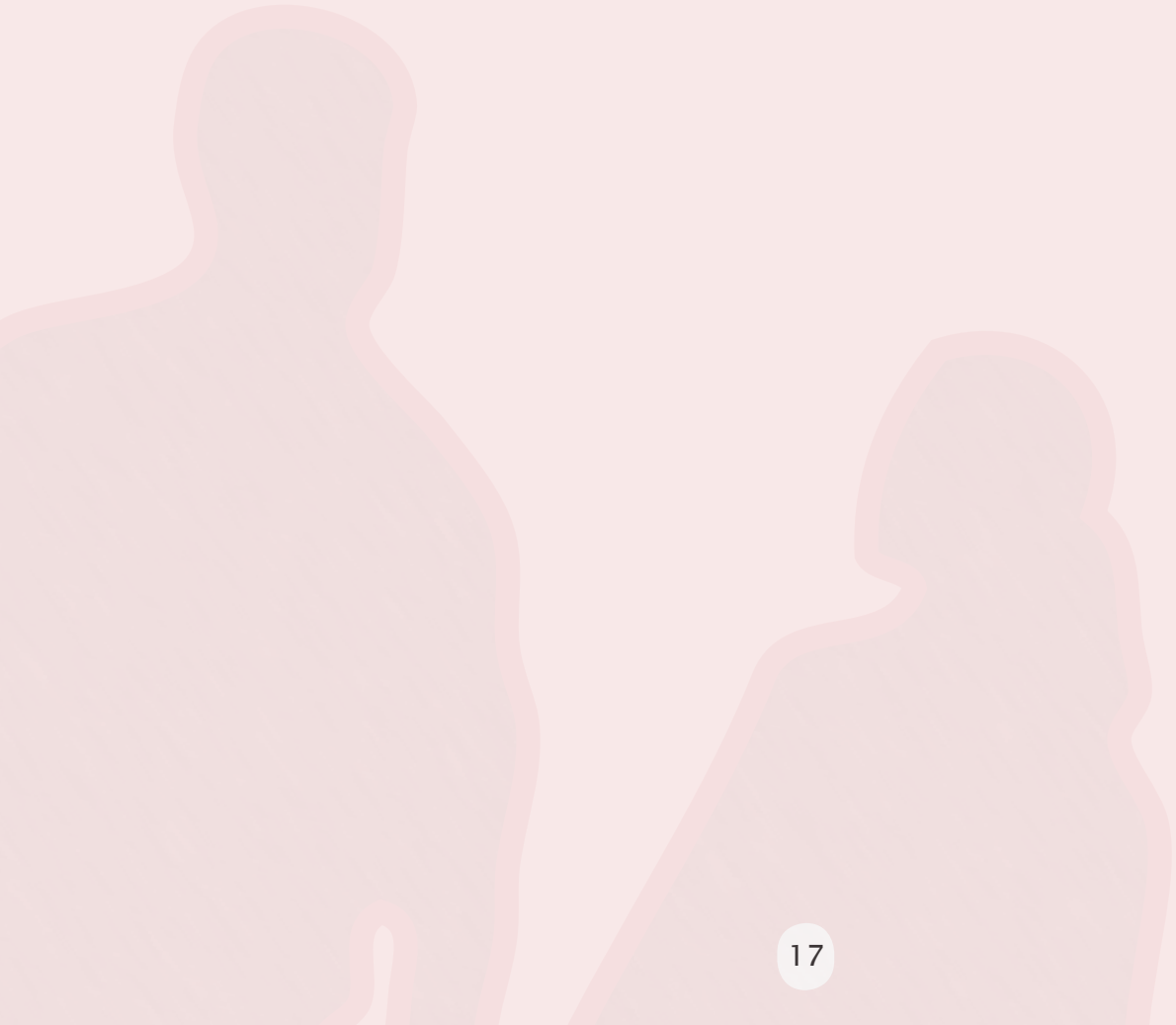
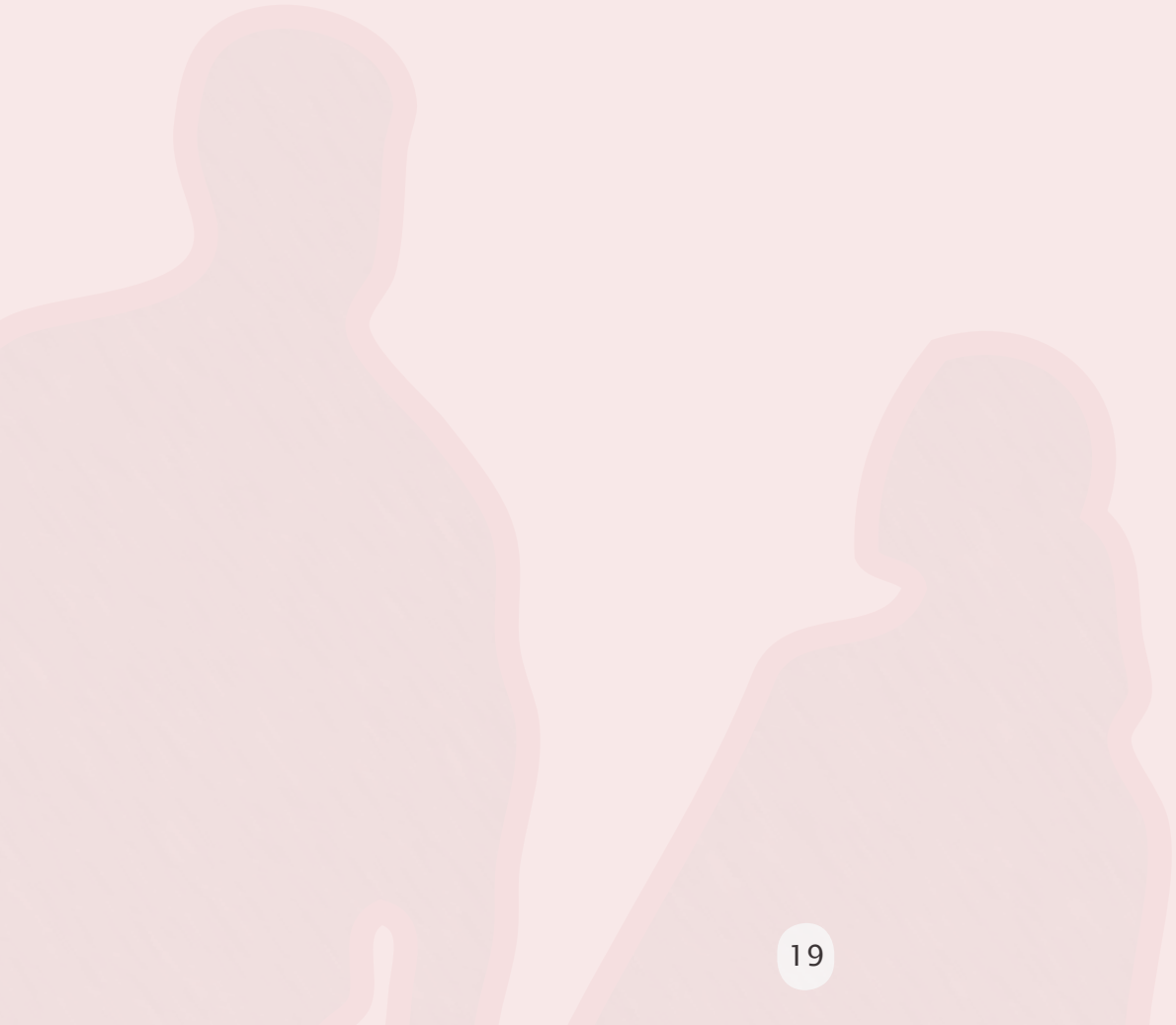


Sexual Dysfunction



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