Imagery rehearsal in the treatment of nightmares in PTSD
Treatment manual for practitioners


Background

Trauma related nightmares are one of the hallmark symptoms of PTSD. There is a growing body of evidence that posttraumatic nightmares respond well to direct interventions. Imagery Rehearsal (IR) has been found to be effective in the treatment of posttraumatic nightmares of victims of crime (Krakow, Hollifield et al., 2001) and women who have been sexually assaulted (Krakow, Johnston et al., 2001). The intervention has been applied in different ways, but this manual outlines a treatment approach based on the work of Thompson, Hamilton and West (1995) and used by Forbes et al. (2001; 2003) This approach encourages patients to target nightmares which are trauma related, and involves discussion of the nightmare content and generation of ideas for changing the script of the nightmare, within the group.

Treatment Overview

In this approach IR consists of six weekly sessions, each of 90 minutes duration. The treatment involves patients selecting a repetitive trauma-related nightmare, describing and writing out the dream in detail, choosing a change to the script or imagery of the dream to allow for mastery and/or completion, writing out this change and mentally rehearsing the changed dream imagery.

Practitioner preparation

Practitioners should be experienced in cognitive behavioural treatment, familiar with the literature on the nature of nightmares in PTSD and familiar with the procedures used in Imagery Rehearsal.

In conducting IR, Practitioners should take care not to create the expectation that the nightmare should have started to change at any particular point in time. This is unlikely to be helpful (patients who have experienced no change may lose hope or stop trying) and is not supported by any evidence. There are large individual differences in the timing and pattern of responses where nightmares change or cease with treatment.
At the same time, Practitioners should listen carefully for any suggestion of change. Some clients have a tendency to disregard, overlook or minimize minor or incidental change. Whilst one can understand that such a change may not be perceived as significant if the nightmare persists, it is an important demonstration that change is possible, and this in itself will challenge most prior beliefs that we have no control over what we dream.

Materials required

Sleep and nightmare diaries

Sleep and nightmare diaries are completed for the week before treatment begins, then given out at the end of each session to be completed as homework between sessions. Diaries are also completed for the week prior to the follow-up session. The information requested on the diaries changes as treatment progresses, so Practitioners should ensure that the correct monitoring sheet is issued on each occasion, and patients are alerted to any changes in the information requested on a week by week basis. Patients may also like to complete sleep diaries via the use of an approved App, in which case the Practitioner should agree on the App to be used prior to commencement of the treatment.

Self-report measures

In addition, the use of self-report instruments, designed to assess changes in nightmares, sleep, PTSD and associated symptomatology (depression, anxiety, substance use) from pre to post treatment, is highly recommended.

Recording of sessions

If sessions are to be audio-taped, permission should be sought at the beginning of the first session. Recording of sessions can aid the Practitioner in preparation and review between sessions.

Patient Handouts

1. Summary of steps in IR (for distribution at the end of Session 1)
2. Target nightmare – original version (for use during session 2)
3. Suggestions for change (for distribution at the end of Session 2)
4. Target nightmare – changed version (for use during session 4)
5. List of suitable Apps with progressive muscle relaxation scripts
SESSION 1: Preparation

Time allocation: 60 minutes

Materials required: Sleep and nightmare diaries

Handout 1: Summary of Steps in IR

Objective

The aim of this introductory session is to create the therapeutic environment necessary for treatment and provide education about the nature of nightmares in PTSD and Imagery Rehearsal.

The key points to be covered:

- Description of imagery rehearsal
- Psychoeducation: The nature of nightmares in PTSD
- Review pre-treatment monitoring sheets
- Discussion of guidelines for selection of target nightmare
- Discussion and distribution of homework

Procedure

Practitioner should provide a rationale for treatment, which includes acknowledgement of the distress and impairment with the problem, as well as the tendency for nightmares to often persist despite standard treatments for PTSD.

The following points should be covered:

- Nightmares are a source of significant distress, and can have a profound impact on both sleep and daytime functioning
- Nightmares involve reliving trauma with all of the intense emotions that accompany that experience, they wake you from sleep, they may leave you feeling agitated and afraid and you may have trouble getting back to sleep
- Poor sleep results in reduced capacity to think, emotional lability, irritability and reduced performance on your daytime activities at work, home and socially
- Nightmares tend to be a chronic and persistent feature of PTSD and often don’t respond to standard treatments for PTSD, so need for treatment that targets the nightmares directly

Description of imagery rehearsal

Give a description of imagery rehearsal therapy, including the key elements of scripting a change into the dream to render it less distressing, and rehearsing the changed dream in imagination, prior to sleep. Patients should be advised that if the changes are successfully incorporated into the night dreaming experience, the dream is expected to become less intense and/or less frequent.

There are two common responses to the concept of IR and it is worth addressing these at the outset:

- First, some patients are resistant to the notion of changing what was a real event which may have resulted in fundamental changes to their life, and perceive the treatment as disrespectful or trivializing of their experience. In addressing this concern, it is of critical importance that a clear distinction be made between the client’s memory of the event and their dream representation of that memory. It can be useful to remind patients that “normal” dreams distort reality, including significant imaginative and symbolic content, for example mixing up elements of the person’s current concerns and previous experiences. If PTSD nightmares change in such a way in the context of the treatment, then they become more like normal dreams. Sufficient time should be devoted to patients’ need to think through and discuss this aspect of the treatment, to prevent it from becoming a barrier to their engagement in treatment.
• Secondly, patients are frequently sceptical about the treatment. It is useful to let them know that we expect this, and in fact would be surprised if they were not sceptical. It is difficult to accept on face value that a nightmare that has persisted unchanged for many years will change or disappear, or that efforts to change dreams in a waking state, will have any influence over what occurs in a sleeping state.

Time should be allowed for expression of such views or concerns and patients encouraged to "keep an open mind" in their approach to treatment whilst applying the procedure as instructed.

**Psychoeducation: The nature of nightmares in PTSD**

Through a discussion of the nature of nightmares in PTSD, patients are likely to feel that their experience is understood and they are not alone. This may be helpful in itself, and in addition create a more positive stance towards treatment, with the knowledge that it targets nightmares of the sort that they experience. Questions and active participation from clients should be encouraged, with Practitioner seeking to uncover patients’ beliefs about the nature of nightmares which may be barriers to treatment. Cover the following points on the nature of posttraumatic nightmares:

• REM and non-REM. Normal dreams occur mainly during REM sleep, are concentrated towards the end of sleep and are associated with body paralysis. In PTSD, nightmares often occur earlier on in sleep and are sometimes accompanied by body movement. Although PTSD nightmares are more likely to occur during REM sleep, they can also occur during non-REM sleep.

• Realistic. PTSD nightmares are often a reasonably faithful replication / replay of the trauma, in all its sensory detail. They are often accompanied by physiological arousal and emotion consistent with the experience of the trauma itself, and may be associated with behavioural enactment of the nightmare storyline.

• Recurrent. PTSD nightmares can recur in similar form for years, with high levels of frequency.

• Symbolic vs replay. PTSD nightmares can vary from accurate replays of trauma to more symbolic in nature.

• Fluctuations over time. As with other PTSD symptoms, it is not uncommon for clients to report that their nightmares wax and wane in frequency and intensity over time.

• Mood dependency. For some, the frequency and intensity of their nightmares seem to vary depending upon their prevailing mood.

**Review pre-treatment monitoring sheets**

Talk through the monitoring sheet with the patient, to ensure that they have filled it in correctly and that what the client has intended to convey is accurately represented in what they have written. If this is done at the outset, you can be more confident that the client’s monitoring and your interpretation of what is written is reliable.

**7) Discussion of guidelines for selection of target nightmare**

In many cases, patients will have more that one recurring nightmare. Over the course of the week, they are asked to select one nightmare to target. Guidelines for selection are simply that the nightmare be trauma-related, occur at least weekly, and the client is prepared to talk about it in the group (although this parameter may vary depending on the context in which the treatment is delivered).

**Distribution of homework**

The session should finish with a discussion of homework. Patients should be instructed to:

• Select the nightmare to be targeted in treatment according to the guidelines provided

• Complete Week 1 sleep and nightmare monitoring sheets
SESSION 2: Preparation

Time allocation: 60 minutes
Materials required: Sleep and nightmare diaries
Handout 2: Target nightmare – original version
Handout 3: Suggestions for change

Objective

The majority of session 2 is focussed on the task of writing out the target nightmare (the nightmare selected for treatment) in all of its sensory detail. This can be difficult for clients and is generally the most taxing component of the treatment. For this reason it is important to provide a sound rationale for the exercise and offer support during its execution. The session finishes with a progressive muscle relaxation exercise, both to redress any heightened arousal experienced during the writing out of the nightmare, and to evaluate any problematic reactions to PMR prior to it being set as a homework task.

The key points to be covered:

- Check in and week’s review
- Identifying, describing and writing out target nightmare
- Discussion of guidelines for changing nightmare
- PMR exercise
- Discussion and distribution of homework

Procedure

Check in

Review monitoring sheets. Complete open-ended enquiry about patients’ nightmares during the past week. Although work hasn’t yet begun on a target nightmare, Practitioner should be aware that changes may occur at any time, in some cases simply by virtue of clients making the decision to tackle (face and conquer) their nightmare. Care should be taken to accept and acknowledge all comments, rather than selectively reinforcing any suggestion of change in patients’ nightmares. At the same time, Practitioner should be alert to change that has gone unnoticed by patients. For example patients may report no change, while their monitoring reveals a reduction in nightmare distress, or they may record no change on their monitoring but in their verbal report comment on a minor change which they have dismissed as irrelevant.

Identifying, describing and writing out target nightmare

The main objective of today’s session is to write out the nightmare they have selected to target in treatment. It is helpful to acknowledge the potential distress involved in this task and critical to provide a rationale. The rationale should include that the patient needs to know where the nightmare (as distinct from the actual event) begins and ends, the detail of what occurs in the dream, including potential “hot spots” and segments rich in sensory detail, in order to make a meaningful contribution to suggestions for change. In addition, this may assist in guiding the level of detail required in the forthcoming changed version of the nightmare.

Ask the patient to describe their target nightmare to the group. In the case of replay nightmares, some clients find it difficult to maintain the distinction between their memory of the actual event and what occurs in their nightmare. Practitioner may need to continually prompt and encourage patients to describe the nightmare as distinct from the actual event. Questions such as “at what point does the dream actually start/finish” and “do you see/hear/smell that in the dream?” are helpful.

Hand out the Target nightmare – original version form and a writing pen. Ask the patient to start their writing at the point where the nightmare starts and to finish writing at the point where the nightmare finishes. In some cases, patients will report that nightmares vary in where they begin and end. In these cases patients
should be advised to begin at the earliest point and conclude at the latest point that the nightmare may include.

While patients are writing out their nightmares, the practitioner should be present and available for support, but not intrusive. In general it is useful to allow patients a few moments to get started, and then leave them to complete the task.

It generally takes patients 15-20 minutes to complete the task. When they finish, collect in and quietly read the nightmare scripts. Ensure (through reading and checking with the client) that the client has written out their nightmare experience rather than an account of the actual event. Help the client to make any modifications necessary.

Discussion of guidelines for changing nightmare

Distribute the “Suggestions for change” handout. Examples should be provided for each suggested change. It is important to go through the examples slowly, allowing time for patients to think about each and consider its potential application to their own nightmares.

PMR exercise

Practitioner should then conduct a Progressive Muscle Relaxation exercise. PMR is the preferred method of relaxation for two reasons. First, PMR is a concrete task requiring the client to focus on tensing and relaxing muscle groups. This task is far removed from the imagery-based task of rehearsing the changed nightmare, and is therefore unlikely to interfere with that task. Secondly, the effectiveness of PMR has been well established. Finishing the session with PMR serves the purpose of both introducing the strategy (and providing the opportunity to monitor any problematic reactions) as well as reducing any residual arousal in patients before they leave the session.

Following PMR, Practitioner should seek feedback from patients on the effect of the relaxation. Address any issues or concerns that arise and advise patients to begin using PMR prior to going to sleep, from that night. As explained above, PMR is the preferred method of relaxation, but in some cases clients have an established and effective alternate method of relaxation which they already use. They should be encouraged to try switching to PMR, but not forced to do so.

Discussion and distribution of homework

Patients should be instructed to:

- Practise PMR nightly before sleep.
- Consider potential changes to nightmares (this will be the focus of next session)
- Complete Week 2 sleep and nightmare monitoring sheets. Patients’ attention should be drawn to the addition of a row in the sleep diary to record PMR practice and a row in the nightmare diary to record occurrence of the target dream.
SESSION 3: Preparation

Time allocation: 60 minutes
Materials required: Sleep and nightmare diaries
Seeding ideas for change to patient’s nightmare

Objective

Session 3 is a brainstorming exercise designed to generate ideas for change in nightmares. Patients need to feel free to contribute ideas which are creative, unrealistic, outlandish, jocular and even irreverent. The Practitioner can maximize the chances for a productive session by re-stating the dream/memory distinction, reassuring patients that no disrespect is intended, and modelling the contribution of highly imaginative, improbable suggestions for change.

The key points to be covered:

- Review PMR practice
- Discussion of potential changes to nightmares
- Discussion and distribution of homework

Procedure

Check in and week’s review

Practitioner should begin the session with an open-ended enquiry about any reflections on last week’s session, and deal with any questions or comments that arise.

This should be followed by an open-ended enquiry about patients’ nightmares during the past week. As noted in Session 2, although work hasn’t yet begun on a target nightmare, Practitioner should be aware that changes may occur at any time, in some cases simply by virtue of clients making the decision to tackle (face and conquer) their nightmare. Care should be taken to accept and acknowledge all comments, rather than selectively reinforcing any suggestion of change in patients’ nightmares. At the same time, Practitioner should be alert to change that has gone unnoticed by patients. For example patients may report no change, while their monitoring reveals a reduction in nightmare distress, or they may record no change on their monitoring but in their verbal report comment on a minor change which they have dismissed as irrelevant.

Review monitoring sheets should then be collected in and the following week’s monitoring sheets distributed.

Review PMR practice

Enquire about the PMR homework, and addressing any obstacles. Pay particular attention to any issues or concerns that arose during PMR, and reinforce the need to practice any new skill to derive maximum benefit.

Discussion of potential changes to nightmares

Review the “Suggestions for change” handout, again providing examples for each.

Ask the patient whether they have had any ideas for change in their nightmare over the week since the last session. If they have, they should write them down on the top of a piece of paper. If they have not, reassure the patient that the task of this session is to generate ideas for them.

- Each nightmare will be addressed in turn.
- The patient reads it out to the Practitioner.
- The Practitioner and patient then brainstorm ideas for change. Patients are encouraged to use their imaginations and not be constrained by what is realistic or sensible. Remind patients that the aim is to alter the nightmare not the memory of the event on which it may be based.
At the end of a predefined brainstorming time, ask the patient whether they have made a note of any potential useful ideas.

**Discussion and distribution of homework**

Patients should be instructed to:

- Take home their list of ideas for change generated during the session, with the task of choosing a change over the course of the week.
- Continue to practice PMR nightly before sleep
- Complete Week 3 sleep and nightmare monitoring sheets. Patients’ attention should be drawn to the addition in the nightmare diary of a row to record whether or not the target dream occurred.
SESSION 4: Preparation

Time allocation: 60 minutes
Materials required: Sleep and nightmare diaries
Handout 4: Target nightmare – changed version

Objective

In Session 4 the main task will be to write out the changed version of the nightmare. This is generally not distressing for patients as the changed version is by design a scenario that is associated with a lower level of distress. Practitioner should ensure however, that the changed version is clearly identifiable as the same dream, modified, rather than being a completely unrelated dream. To achieve this, ensure that the script of the changed version begins in the same way as the original before the change is introduced. It is also recommended that the changed script match the original in the level of detail. Patients are still likely to be sceptical about the procedure, but should again be encouraged to withhold judgement and complete the task to the best of their ability.

The key points to be covered:
- Identification of selected changes to nightmare
- Write the changed dream script
- Read aloud new version
- Discussion and distribution of homework

Procedure

Check in and week’s review

Practitioner should begin the session with an open-ended enquiry about any reflections on last week’s session, and deal with any questions or comments that arise.

This should be followed by an open-ended enquiry about patients’ nightmares during the past week. Care should be taken to accept and acknowledge all comments, rather than selectively reinforcing any suggestion of change in patients’ nightmares. At the same time, Practitioner should be alert to change that has gone unnoticed by patients. For example patients may report no change, while their monitoring reveals a reduction in nightmare distress, or they may record no change on their monitoring but in their verbal report comment on a minor change which they have dismissed as irrelevant.

Following the open-ended enquiry, Practitioner should prompt for any changes to the content, frequency and intensity of the nightmares. Practitioner may draw on information recorded in previous weeks’ monitoring sheet to identify any changes which the patient has not spontaneously reported. Patients should be encouraged to reflect on these changes and reminded that any change, no matter how minor, is significant when the nightmare has remained unchanged for many years.

Identification of selected changes to nightmare

The patient should be asked what change they have decided to make to their nightmare. Establish at what point the change comes in to the original nightmare, and develop a clear plan of what will be written. The patient should be given a copy of their original nightmare script with the instruction to write out the same beginning on the changed version, before introducing the changed storyline. The storyline should continue to its natural end, usually a scene representing safety. Ensure that the patient knows where to start and finish their changed version.

Write the changed dream script

Patients write out the changed version of their dream on the “Target nightmare – changed version” sheet.
Distribution of homework

Patients should be instructed to:

• Read the changed version script nightly prior to sleep, imagining the scenes as clearly as possible in “the mind’s eye”.

• Follow imagery rehearsal with the PMR audio-tape.

• Complete Week 4 sleep and nightmare monitoring sheets. Patients’ attention should be drawn to the addition in the sleep diary of the requirement to record imagery rehearsal of changed dream, and in the nightmare diary, to record any change in the target dream.
SESSIONS 5 & 6: Preparation

Time allocation: 60 minutes
Materials required: Sleep and nightmare diaries
Target nightmare – Changed version forms

Objective

No new material is introduced in sessions 5 and 6. These sessions allow the Practitioner to monitor a patient’s rehearsal and relaxation procedures and make suggestions to identify obstacles to response, enhance, modify or fine-tune the process, where necessary.

The key points to be covered:

- Fine tune changed dream script and/or rehearsal and relaxation procedure as necessary
- Discuss and distribute homework
- Arrange follow-up session

Procedure

Check in and week’s review

Open-ended enquiry about nightmares during the past week. Care should be taken to accept and acknowledge all comments, rather than selectively reinforcing any suggestion of change in patients’ nightmares. At the same time, Practitioner should be alert to change that has gone unnoticed by patients. For example patients may report no change, while their monitoring reveals a reduction in nightmare distress, or they may record no change on their monitoring but in their verbal report comment on a minor change which they have dismissed as irrelevant.

Prompt the patient to consider any changes to the content, frequency and intensity of their nightmares. Practitioner may draw on information recorded in previous weeks’ monitoring sheet to identify any changes which the patients have not spontaneously reported. Patients should be encouraged to reflect on these changes and reminded that any change, no matter how minor, is significant when the nightmare has remained unchanged for many years.

Fine tune changed dream script and/or rehearsal and relaxation procedure as necessary

Check with patients that they are satisfied with the script they have written. Occasionally, patients no longer feel comfortable with a change they have made, or believe that the changed dream would still result in considerable distress should it arise. In these cases, patients should be encouraged to make any further desired changes to the dream and write out another script. Where there is some dissatisfaction with the script, inquire as to whether there are identifiable obstacles to acceptance of the changed script.

Enquire about the rehearsal procedure, ensuring that patients are rehearsing the imagery of the dream, rather than just reading out the script. Attention to the sensory details will assist this. If patients are experiencing any difficulty with the rehearsal and relaxation procedure. These are generally related to the practicalities of implementing the treatment in their particular home environment and domestic routine.

Discussion and distribution of homework

Patients should be instructed to:

- Read the changed version script nightly prior to sleep, imagining the scenes as clearly as possible in “the mind’s eye”.
- Follow imagery rehearsal with the PMR audio-tape.
- Complete Week 5 or 6 (as appropriate) sleep and nightmare monitoring sheets.

NB: Patients should be advised that following the Week 6 monitoring, they are no longer required to maintain the nightly imagery rehearsal and relaxation procedure, but may choose to do so if they wish.
Summary of steps in imagery rehearsal therapy

This is to remind you of what was discussed in Session 1. You may like to keep it as a reference as we progress through treatment.

PLEASE NOTE: I don’t want you to work on any of these steps independently – we will work through the process together over the course of the six week treatment.

**Step 1. Practice relaxation techniques each night before you go to bed.**

**Step 2. Choose a recurring nightmare you would like to work with in this group. This will be your target nightmare.**

**Step 3. Write down your target nightmare with as many details as possible. Include sensory descriptions (sights, smells, sounds, tastes, etc.). Also include any thoughts and feelings you have during the dream.**

**Step 4. Choose a change for the nightmare.**

**Step 5. Write down the full nightmare with the change.**

**Step 6. **REHEARSAL + RELAXATION**: Practice rehearsal of the changed nightmare by visualising the entire dream with the change each night before practising the relaxation techniques.**
Suggestions for change

The aim of these suggestions is to assist you in generating ideas regarding changes to the content of your nightmare. The changes are aimed to provide you with an increased sense of control or mastery over the dream and its content, or help you to complete the dream.

Suggestions of changes to dream content include:

1. Devising alternate endings to the dream. These alternate endings may range from minor through to highly imaginative.

2. Inserting reminders into the dream that prompt different ways of viewing the events of the dream, e.g., placing meaningful objects into the dream scene that remind you that you survived the events or having others present in the dream remind you of other ways you have learned to deal with or think about the events.

3. Transforming threatening objects into benign or harmless ones.

4. ‘Distancing techniques’ e.g., viewing the dream as though on a screen or TV that you can switch off or change the channel.

5. Any other ‘only a dream’ reminders.
In the space provided below, please describe the distressing dream in as many details as possible. Include sensory descriptions (sights, smells, sounds, tastes, etc.). Please note the feelings, images, and thoughts associated in this dream, being as specific as possible. Note when the dream begins and when it ends.

In my nightmare,
Target nightmare - Changed version

Name: ___________________________________________ Date:__________

In the space provided below, please describe the changed version of your dream in as many details as possible. Include sensory descriptions (sights, smells, sounds, tastes, etc.). Please note the feelings, images, and thoughts associated in this dream, being as specific as possible. Note when the dream begins and when it ends.

In my changed dream,

__________________________________________________________________________________

__________________________________________________________________________________

__________________________________________________________________________________

__________________________________________________________________________________

__________________________________________________________________________________