Safe Practice in Rebound Therapy

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Rebound Therapy Association for Chartered Physiotherapists

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INTRODUCTION

This document has been written to provide information and advice on safe practice in rebound therapy, where the use of such is indicated following assessment.

This guidance is intended to be used by a physiotherapist after completion of a practical course in rebound therapy, or after gaining a portfolio of experience by working alongside an experienced practitioner.

This information paper does not override the responsibility of the physiotherapist to make appropriate decisions for individual service users, in consultation with them and/or their guardian or carer.

The information and advice provided here was arrived at after careful consideration of available evidence and should be used in conjunction with the Chartered Society of Physiotherapy Quality Assurance Standards for Physiotherapy Service Delivery (2013) and the Chartered Society of Physiotherapy Code of Members' Professional Values and Behaviour (2012) and the Health and Care Professions Council, Standards of Conduct, Performance and Ethics (2016).

The safety procedures in this information paper are based on a combination of the above, together with the experience of Chartered physiotherapists specialising in Adult Learning Disabilities. Paediatrics, Respiratory Care, Neurology and Special Needs Trampoline Coaching.

A bibliography is included; but it is important to note that it does **not** provide a comprehensive and systematic review of literature about rebound therapy. Such literature is limited and it is the responsibility of the user to keep up to date with the evidence to support practice.

DEFINITION OF REBOUND THERAPY

Rebound therapy is the therapeutic use of the trampoline; it is distinct from gymnastic trampolining. The trampoline has long been used as a piece of equipment within sports and leisure services and has been used within Special Education since the 1970's. It has become an adjunct to physiotherapy for adults and children.

Rebound therapy is currently used with people with a wide range of abilities from mild to profound physical and learning disability, sensory needs, mental health needs and some neurological and other medical conditions. In addition to providing a physical therapy, Rebound therapy provides many people with a valuable opportunity to enjoy movement and interaction (Crampton 2002).

Service users for whom rebound therapy is an intervention of choice may have multiple and alternative methods of communication of which the physiotherapist and all supporting staff should be aware.

SAFETY PROCEDURES

It is the responsibility of the physiotherapist to ensure that they are working within the Quality Assurance Standards for Physiotherapy Service Delivery (2013) Attention is drawn to Standard 2.3 that identifies patients are treated in an environment that is safe for patients, physiotherapists and carers; as such risk assessment must be implicit within the assessment process that concluded in identifying rebound therapy as a suitable intervention. Attention is also drawn to Standard 2.5 All medical devices are safe and fit for purpose, ensuring service user, carer and physiotherapy team safety.

When using the trampoline, it is the session leader who takes primary responsibility for safety of that session.

It is the responsibility of the physiotherapist or session leader to ensure that appropriate clothing is worn by all those involved in a rebound therapy session.

It is the responsibility of the physiotherapist to ensure he/she is competent in the use of rebound therapy and that all operators involved in a rebound therapy session have been trained by such a physiotherapist, and can demonstrate a satisfactory level of ability.

All spotters have training from a physiotherapist who is competent in rebound therapy or a British Gymnastics (B.G.) coach, and must achieve a satisfactory standard as assessed by the physiotherapist responsible for rebound therapy session.

It is the responsibility of the physiotherapist or session leader to ensure adherence to safety standards at all times when using the trampoline for therapeutic activity.

The people working on the trampoline with the service user are the operators, delivering the treatment plan. This may be the physiotherapist or may be another individual with evidence of competence in rebound therapy who is delivering the treatment plan devised by the physiotherapist.

The physiotherapist or session leader supervising the session should ensure that:

1. The physiotherapist/operator, the service user or others involved are fit to participate in the session, taking account of recent illness or injury;

2. There is no jumping without correct footwear; trampoline shoes, socks with non-slip soles or cotton socks are worn to prevent slipping on a webbed bed; bare feet are preferable for a flat sheet bed;

3. Fingers are not placed through webbing or around springs;

4. There is no double bouncing between service user/operator or service user/service user;

5. There is no eating or drinking on the trampoline;

6. Account is taken of the physiological effects of bouncing on the cardiovascular system;

7. No jewellery, watches, chains or articles that could catch on the bed, or on the person; all body piercing, including tongue studs, should be removed or taped over. Pockets should be emptied;

8. Long hair is tied back; nails are kept short;

9. Suitable loose clothes are worn, which will protect the skin, depending on the activity;

10. No new skills are attempted without assessing the readiness of the service user and without progressive practices;

11. All accidents are reported to the appropriate authority using local policies and procedures;

12. Operators and service users mount and dismount in sitting in the middle of the long side of the trampoline; unless part of an agreed therapy programme for a service user, or part of a documented risk assessment.

13. No one passes under the bed at any time. However, a team member may work to generate energy from under the bed as part of the treatment programme and under the instruction of the session leader;

14. No equipment is stored beneath the bed when it is in operation, including trampoline roller stands;

15 All people not actively involved on the trampoline or in spotting are kept away from the immediate area of the bed;

16. The risk assessment has identified the appropriate number of spotters are in place;

- If the operator or service user are lying or in sitting, there should be a minimum of 2 spotters, one on each long side of the trampoline.

- If either an operator or service user is standing or jumping there should be a minimum of 4 spotters, one on each side of the trampoline, or 2 end decks and 1 spotter on each of the long sides.

CONTRAINDICATIONS & CARE FACTORS

In line with the Quality Assurance Standards for Physiotherapy Service Delivery (2013) it is the responsibility of the physiotherapist to ensure he/she is aware of the precautions and absolute contra-indications to rebound therapy, and that appropriate assessment is undertaken. It is recommended that the physiotherapist undertake certain checks of self, other staff and service user for suitability for rebound therapy. If any of the following contraindications are present, the physiotherapist will use his/her professional knowledge and judgement and seek appropriate advice and medical information in order to make an informed decision about modification of treatment.

Absolute Contraindications

- Cranio-vertebral Instability;
  (including Atlanto-Axial Instability (AAI) and Atlanto-Occipital Instability (AOI)
- Detaching retina
- Pregnancy

Care Factors

The physiotherapist should check the service user's suitability for rebound therapy. If any of the following are present, then the therapy will have to be modified accordingly.

- Cardiac or circulatory problems
- Downs syndrome
- Respiratory problems
- Vertigo, blackouts or nausea
- Epilepsy
- Spinal cord or neck problems
- Spinal rodding/spinal fusion
- Open wounds
- Any recent medical attention
- Brittle bones/osteoporosis
- Sensitive or fragile skin
- Unstable/hypermobile/painful joints
- Hernias
- Implant surgery (e.g. baclofen pumps, VNS-vagal nerve stimulator)
- Prolapse
- Challenging behaviour
- Gastrostomy/colostomy
- Gastric reflux
- Stress incontinence
- Joint replacement

- Sensory impairment
- Mental health needs

SAFETY – THE ENVIRONMENT

The environment should be suitable for the use of the trampoline and undertaking rebound therapy sessions. Specifically, this means;

1. The trampoline should be sited away from overhead projections, walls or any protruding structure which may cause injury;

2. The immediate vicinity of the trampoline should be clear, however large pieces of equipment for moving and handling may remain in situ at the discretion of the physiotherapist or session leader;

3. Light from the windows should not dazzle the operator, service user or spotters;

4. Where the bed is being used for trampolining, a ceiling height of 4.87metres (16 feet) is required. If lower, the operator should remain in contact with the service user at all times and not bounce higher than 30 centimetres (1 foot). Where the bed is being used for Rebound, the safe ceiling height must be determined by the session leader within the risk assessment;

5. The session leader should be aware of other equipment in use in the area and it is the responsibility of the session leader to maintain the safety of all participants.

SAFETY – THE TRAMPOLINE

It is the responsibility of the physiotherapist to maintain close links with the authority responsible for the maintenance of the trampoline and any additional equipment such as hoists and ramps. It is the responsibility of the physiotherapist to check with the responsible authority that the trampoline is serviced annually and maintain records of the annual check.

1. The trampoline should be chained or locked away in a folded position when not in use.

2. The trampoline must never be left unattended in an open position, unless the area can be secured.
3. The trampoline should be correctly and safely erected and folded; all operators involved in the sessions should be trained in safety aspects of erecting and folding the bed.

4. Erecting and folding the bed must be carried out under the direct supervision of the session leader; there should be at least 4 people to erect and fold the trampoline at all times, unless using a half-size bed, in which case 2 people can be used following a risk assessment. If the bed has been erected by another authority, it is still the responsibility of the session leader/physiotherapist to fully check the bed before use.

5. Service users must be kept away from the area when erecting and folding the trampoline.

6. The roller stands should be removed and placed away from the trampoline, flat on the floor, with hooks facing down.

7. All operators must be competent in safe manual handling practice and understand moving and handling risk assessment.

8. If moving and handling equipment is available to lift the trampoline, it should be used.

9. Equipment should be checked for faults prior to each use. Specifically, the following should be checked:

    i. The roller stands, for freely revolving hooks, freely swivelling and running castors;
    ii. All Allen screws on the leg braces, chains and joints where applicable;
    iii. All frame pads are securely in place;
    iv. Pads for the possibility of rips or tears, or loose or missing clips, or worn areas where little protection would be afforded anyone landing on that section;
    v. The outer frame for wear at the hinges and bowing of the long side due to drooping ends;
    vi. The anchor bar on both the frame and bed for excessive wear from the hooks of the cables or springs;
    vii. The springs or cables to ensure they are all in place, with hooks facing downwards, a suitable tension and the same length;
    viii. For tears or thin areas on solid bed; breaks in webbing or stitches on webbed beds which might allow a toe or finger to catch and cause injury; uneven tension indicated by the red lines not being straight; worn or broken anchor bars around the edge of the bed;
    ix. The session leader must test the trampoline before the rebound therapy session begins;
    x. All damage should be reported to the appropriate responsible authority. If necessary the trampoline should be taken out of service until it has been repaired and declared safe;
    xi. Precautions are put in place to prevent contact of bodily fluid with the apparatus. If contaminated, the bed must be treated/cleaned in line with local Care of Substances Hazardous to Health (CoSHH) and infection control policies.

SAFETY – THE PHYSIOTHERAPIST

With reference to the Chartered Society of Physiotherapy Scope of Practice, (2014) Point 2 Individual Scope of Practice, working safely and competently within your personal scope of practice means that you must ensure you have the skills, knowledge and abilities required to carry out your role. The physiotherapist has a responsibility to ensure an appropriate level of training and is skilled in a range of techniques relevant to rebound therapy. Specifically, the physiotherapist should be able to demonstrate understanding of and competence in the following:

- Physical properties of the trampoline;
- Safety and precautions in use of the trampoline;
- Physiological effects of rebound therapy;

- Perceived therapeutic effects of rebound therapy;
- Contra-indications and care factors in use of the trampoline;
- Assessment of suitability of service user for rebound therapy;
- Safe and appropriate handling of the service user and any equipment used in rebound therapy;
- Personal trampolining skills such as stopping, bouncing, jumping, turns, star jump and straddle jump, pike jump and seat drop as appropriate;
- Rebound therapy skills, specifically:
    - getting on/off safely;
    - bouncing in a stable position;
    - killing (stopping) the bed; (self and others)
    - damping the bed;
    - riding the bed;
    - kipping, (single foot and double feet)
    - the effective use of various therapeutic starting positions, care factors and appropriate implementation and progression.

GLOSSARY

Killing/stopping	bringing the trampoline bed to a complete halt-taking the bed from dynamic movement to stillness.
Riding	smoothing the bed to synchronic movement, the operator's feet remain in contact with the bed whilst the service user is bouncing or jumping.
Damping	the operator absorbs the energy from the bed to control the amount of energy in the bed.
Kipping	controlling the force of the trampoline-the transference of energy from the operator to service user through the bed to enable the service user to move.
Double bouncing	where two people on the trampoline jump alternately.
Operator	anyone other than the service user working on the bed.
Session leader	the person designated by the physiotherapist to have overall responsibility for the session.
Spotters	persons standing on the floor around the trampoline to prevent operators or service users from falling from the bed and to draw attention to any other safety issues.

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CSP Resources

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