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VOLUME 9, ISSUE 1

REG.No.GUJENG/2009/30341

ISSN NO.: 0976-1993

JULY-AUG'2017

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From The Director's Desk



Dear Readers

"Adventure without risk is Disneyland". Sounds interesting when you hear this for the first time. More so when you learn that the statement comes from a 15 year old. Yes, this is what the home page of her website says. This is what her email signature reads. This single statement portrays her life philosophy of how taking risks is what adventure is all about.

Yes! I am talking about the 15-year-old mountaineering sensation, Jaahnavi Sriperambuduru from Hyderabad, who aims to become the first and youngest girl from India

to scale all 'Seven Summits' in the world. The highest peak on each continent - Asia Mt. Everest, Australia Mt. Kosciuszko, South America Mt. Aconcagua, Antarctica Mt. Vinson Massif, North America Mt. Denali, Europe Mt. Elbrus and Africa Mt. Kilimanjaro - are part of Misson7Summit.

By the age of 14 years, Jaahnavi has completed Phase IV of her Mission. Out of the 7 continent peaks, she has completed Africa, Europe, Australia and North America and is all set to complete the rest 3 continents. Her mission started with Mt. Kilimanjaro in Africa (5,895 mt) on October 2, 2014, where she was the youngest girl from India to achieve this feat.



Courage is like a muscle; It is strengthened by use.

She created a world record on July 31, 2015 by climbing the highest mountain peak in Europe - Mt. Elbrus at the age of 13. She climbed Mount Kosciuszko in Australia (7,310 ft) in Dec 2015 and most recently Alaska's own Mt. Denali (20,308 ft) which she summited on July 10th 2016 to become the youngest Person from India to accomplish this feat.

In this issue, we bring to you an exclusive interview with this mysterious mountain girl and what makes her take up such a challenging sport at this age. What are the kind of preparations required, how is her training schedule and most importantly, what is the role of physiotherapy in her journey.

Apart from the cover feature, *Devdeep Ahuja* writes on the importance of social support in rehabilitation adherence in continuation to his previous article. Also covered is the second part of the article latest in Tendon Rehabilitation by *Parivesh Kumar*, where he discusses tendinopathy treatments. *Diana Pinto* & team presents a collection of a few case studies to show the benefits of dry needling in about six different conditions, which have no defined treatment approach.

Prof. Satyen Bhattacharyya has presented a detailed account of the history and origin of Cupping along with 13 different types of Cupping Methods. He shall discuss more in the next article in the forthcoming issue on the conditions treated with cupping, various cupping equipments etc.

Bhavsan Bhavsar has given a brief summary on the importance of visual communication and art in physiotherapy. *Smruti Dash* & *Anshuman Rath* have shed light on how Mobile apps can help physiotherapists in their practice. *Poonam Botadara* has shared her experiences of home health care and what needs to be taken care while you are at a home visit. Also presented are the current affairs on the latest in physiotherapy from across the globe.

8th Sept 2017 was the World Physiotherapy Day. You all must have celebrated the day with various activities. Send us a brief write up with photographs about your celebration and we shall publish it in the next issue. Last but not the least, from this issue onwards, we are re-introducing your favourite section Word-Maze. So make sure you participate and win the prize.

I hope this issue would help you in gaining more clinically relevant information and knowledge to help you in your professional pursuit.

To your good health and comfort,
Mukesh Nayak

India's first Magazine for Physiotherapists

PHYSIOTIMES®

Volume 9, Issue 1, July-August 2017

REG.No.GUJENG/2009/30341 ISSN No.: 0976-1993

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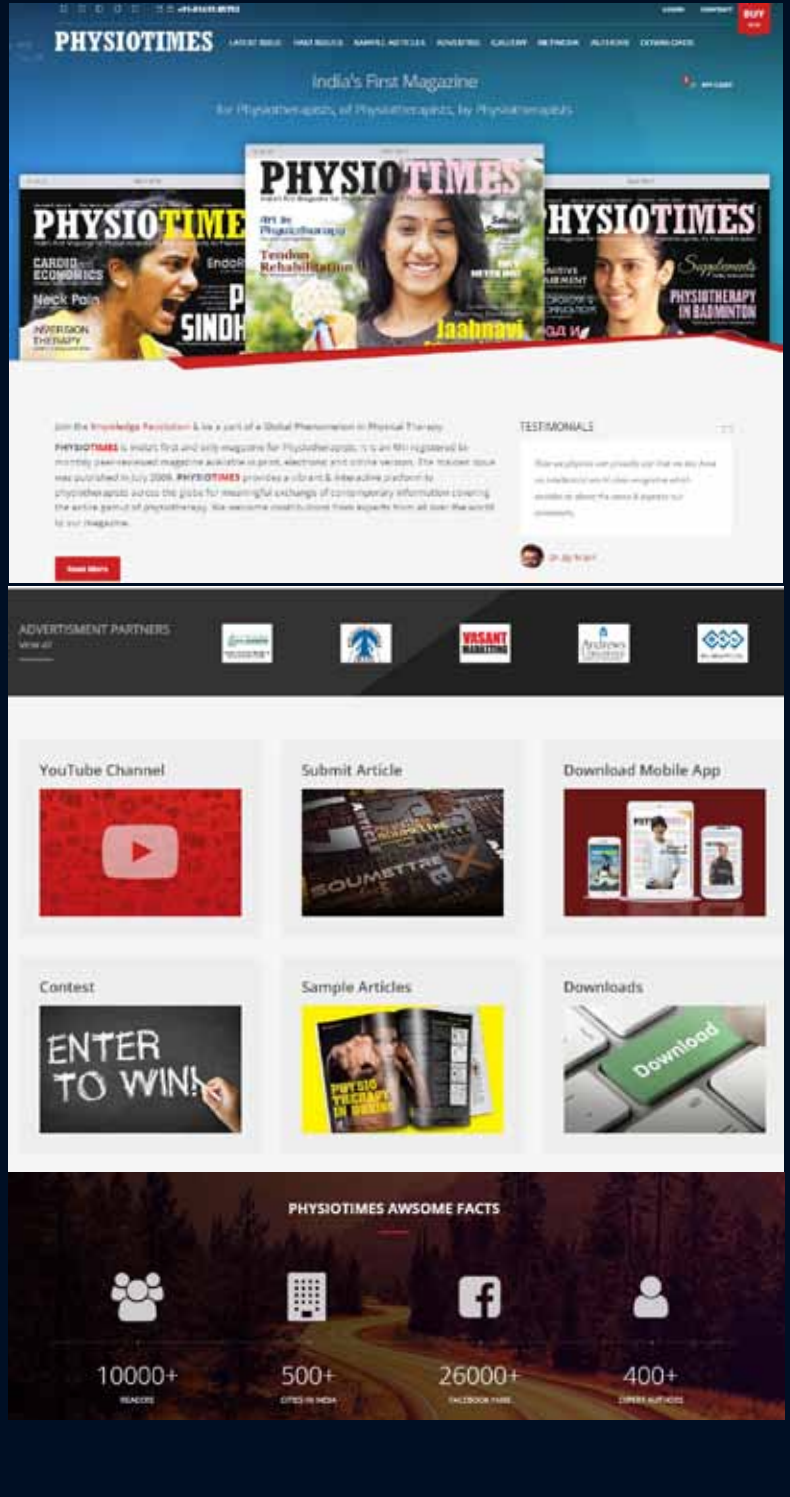
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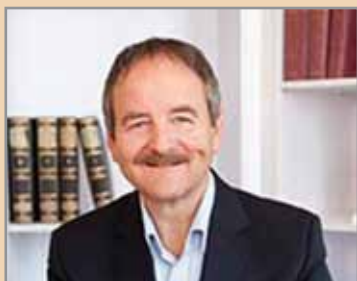
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Quintessential

The Latest in Tendon Rehabilitation: Key Management Tactics

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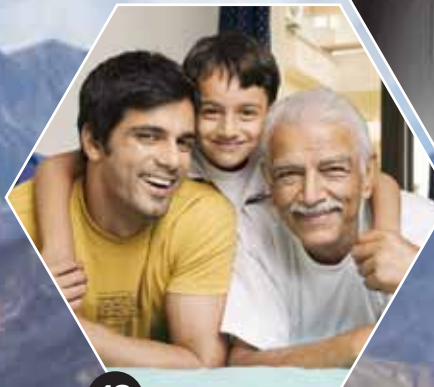
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Social Support: The key to rehabilitation adherence

Devdeep Ahuja





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AN INTERVIEW WITH
**JAAHNAVI
SRIPERAMBUDURU**
THE MYSETIOUS
MOUNTAIN GIRL

Jaahnavi Sriperambuduru (The Mysterious Mountain Girl - Himaputri) is a 15 year old from Hyderabad, Telangana, probably the youngest girl in the world to have started her adventure career at an early age of 10 months, when her parents took her into wilderness in a specially designed backpack to give her the first taste of outdoor.

She is on a Mission to climb the highest peaks of the 7 continents known as the #Mission7Summit and reach the farthest point of the globe "The North Pole" and the "The South Pole" (The Grand Slam) to become the world's youngest girl to do so.

Till date she has completed 4 continents highest peaks namely: 1) Mt. Kilimanjaro (Africa), 2) Mt. Elbrus (Europe), 3) Mt. Kosciusko (Australia), 4) Mt. Denali (North America). She became the world's youngest girl to summit Mt. Elbrus at the age of 13 yrs in 2015.

In July'2016, she also became first Indian born Telugu girl to be invited to the white house to take part in National South Asian symposium. Apart from Mountaineering she practices classical dance and attends drawing classes.

Jaahnavi is also a motivational speaker and works towards "Empowering the girl child" which she started by not only

educating the girls but also providing them with life skills under “JanJay Foundation”. Jaahnavi is one of the youngest TEDx Hyderabad speakers and also travels the globe for educating girls about “The Importance of Education” and want to give an exposure into the wilderness through which, she feels one can understand their own potential and develop it. She gives commercials related to girl empowerment and send messages for girl stereotypes for gender equality. Her recent campaign #Am Pretty Tough through one of the leading cosmetic company of India, Dabur Gulabari, has brought about a major change in the process of “Don’t Judge a Book by its cover”. *In an exclusive chat with Mukesh Nayak, Director, PHYSIOTIMES, Jaahnavi shares her story of triumph and challenges she faces in her quest to complete the Mission7Summit. . Presented here are the excerpts.*



1. Please tell us in brief about your early life and family background.

A. I was introduced to this sport at a very early age of 10 months, by the guidance of my coach, mentor, My father. He wanted to give me the exposure to wilderness and nature. My father always wanted to make me something different for which my mother supported every time. My father is Dr. S. Krishna Rao, my mother S.Saraswathi, I have a younger brother who is 14 years S.Jayavardhan and I also have two dogs (I am a pet lover!). From my childhood, I was always in the field of adventure, going for extracurricular activities.

2. At what age did you start mountaineering & what inspired you to get into it?

A. My professional climbing started when I was 9 years. My first exposure to high altitude was in Utrakand for a trek to Rookpkund (16000 Ft). My father has been the inspiration for me to get into this sport. Later I came to know about the mission known as 7 summits! My father said why we don't try this challenge. I always had the answer 'Yes'. So before taking up with this mission, I went for a practice climb to Ladakh. From here on I have started my Mission7Summit.

3. Tell us about your first mission.

A. My first mission of mountaineering as I said was 16000 ft. in Utrakand known as Rookpkund Trek and my first mission of #Mission7Summit was Mt. Kilimanjaro (Africa) which is one of the most memorable one as Mt. Kilimanjaro is world's single standing mountain with 4 different terrain to cross and reach the summit.

4. How do you go about training and preparation on a day to day basis? (Fitness, diet and other regimen that you follow)

A. My day starts at 5:00 am. Like other sports, training for my expeditions takes vigorous and intense workout. For this I train under the able guidance of my fitness coach a Dronacharya Awardee Nagapuri Ramesh Sir. So, I train twice a day morning for 4 hours and in the evening 2 hours for which my younger brother accompanies me. I run 20 kms on alternate days in a week. I do 60-65 kms cycling on alternate days in a week also. My practice schedule keeps on changing. I also put on 25 kgs of weight on my back and then climb on some hilly areas. I keep travelling to different parts of India for practice. For this type of vigorous training I intake 4000 calories a day, for which I must follow a very strict diet.

5. How do you prepare just before a specific mission. How does it differ from your routine training?

A. When I have my expeditions coming up, my father and I start planning for it 3-4 months ahead depending upon which climb I am going for (sometimes even 6 months ahead). So the main thing which differs here from my routine training is that I hardly get rest after my practice, we are on roads in search of Sponsors (Mountaineering is a very expensive sport!!). I must pack my equipment, weigh the bags, set up my electronics, purchase my personal essentials, take care of my health, I shouldn't be having any injuries (so I should be very careful while training which Ramesh sir is very particular) and more over I should also focus on Recovery stage.

6. What are the key challenges you face while mountaineering?

A. The list of challenges we face on the mountains has no full stop. The major challenge which I have faced is the unpredictable weather. We do not know when the weather would change. I say - 'Expect the Unexpected'. The other challenge is communication. In few countries guides do not speak English, so it is very difficult for us to ask for our requirements or to even say something and the other major one is food. We as Indians have a vast variety of dishes for breakfast, lunch, evening snacks

and dinner. So, we are used to variety of dishes for each meal. But, during expeditions we do not have those kinds of options. We must manage with the food

Physiotherapy has really helped me during my last 2 expeditions in making myself more flexible and for strengthening my muscles.

we are served. On the mountains, we won't feel hungry but, we must eat. We won't feel thirsty but we need to keep ourselves hydrated. We won't feel sleepy but, we need to give our mind and body rest.

7. What are the health problems that a mountaineer can suffer during a mission?

The basic problem a mountaineer suffers is AMS (Altitude Mountain Sickness). It can happen to anybody. If you are not well acclimatized then AMS can come. This can happen to world's best mountaineer also. Second is Pulmonary Edema. In this case, excess fluid develops in the lungs, either in the lung tissue itself.

This will happen only when you are going above 7000 metres. After 7000 metres, the body and mind connection goes off. You will not have much control on your mind. You may pull off your gloves, hat, socks etc. People have died due to this. That is why we are totally fit - mentally and physically.

After 8000 metres, the "Death Zone" starts. The problem of "High Altitude Cerebral Edema" starts. In this case, your brain starts expanding. This happens because of lack of oxygen circulation in your body. As a result, the person dies. There is one more thing called – frostbite which is also known as Ice Burn. This happens only if we are not properly geared or covered. Due to this, the body part will first turn blue, then red and then black. That body part will have to be cut off from your body.

8. What are the most common injuries that you have encountered while mountaineering?

A. Till date I have not encountered any major injuries, but few minor ones I have experienced, like the ankle sprains or twist or some bruises when we climb the rocks or slip down during the steep climbs.

9. Have you heard of physiotherapy? If yes, when and how?

A. Yes, I have my own physiotherapist, whom I visit occasionally before my practice sessions of an expedition and she gives me the list of exercise and precautions for my practice and other necessary information to follow, which really helps me to prevent major injuries.

10. What role has physiotherapy played in helping you manage your injuries and maintain your general fitness levels?

A. Yes, Physiotherapy plays a major role for any sports person and particularly when it comes to Mountaineering we should protect more from the injuries as we always are prone for accidents. For me physiotherapy has really helped me during my last 2 expeditions in making myself more flexible and for strengthening my muscles, but to be very honest, I could not afford to have a full time physiotherapist as we are still on the mercy of sponsors for our all climbs.

11. Who are your role models when it comes to mountaineering?

A. My first role model is my father and the other role model is Late Malli Mastan sir, as he is a Guinness record holder who has climbed all the 7 mountains of the seven continents in just 172 days, who left all of his education to be in the mountains.

12. What is the best thing about mountaineering?

A. Mountaineering is such a sport where you be yourself, which is one of the best thing. When you can be yourself you will know your strengths and weaknesses. The other best thing is that you will know how much you can motivate yourself when you are alone, and how much you can pull yourself when you are exhausted, tired and cannot put that one last step. This sport helps you build your confidence and transforms the overall personality of a person.



13. What are the top three qualities required to be a successful mountaineer?

A. What I believe - 'A mountaineer will be successful not when he or she climbs a mountain or accomplishes a mission, but when they conquer themselves!' But then the three qualities would be:

1. When they believe in themselves that 'Yes I can do it'
2. Discipline within ourselves first.
3. To know one's weakness and accept it for a better change.

It has taught me one big lesson that life gives you many opportunities and chance, but it all depends upon us when we grab the opportunity and make the best use of it. It also taught me that one mistake will be your last mistake, so it taught me to be focused, alert, and conscious of what I am doing.

15. When was the first time your achievements were noticed by the world and the media?

A. My first achievement was noticed when I climbed the highest trekable peak in Ladakh Stok Kangri, as I was the youngest girl to climb at the age of 12 yrs.

I could not afford to have a full time physiotherapist as we are still on the mercy of sponsors for our all climbs.

14. Please share some life lessons mountaineering has taught you.

A. Mountaineering has taught me to believe in me that I am capable of anything. It has taught me to fight back my own problems. It has made me realize that I was headstrong for what I believe in and for what I go for.

16. Off late, you have been receiving a lot of media coverage and attention.

A. Yes, I have been receiving a lot of media coverage and attention since I climbed Stok Kangri.

How do you handle this fame at such a young age?

A. Yes, I have been receiving a lot of media coverage and attention, but I never like anyone calling me a celebrity or a superstar. I just like to be treated the way I am treated normally. My father always tells me *“the day you feel proud about yourself that you are great, than your downfall starts.”*

Even when I was invited by The White House and after that I became the youngest TEDx speaker also, I felt that I am doing what I like, so I generally see things as they come, so even as a young girl I feel like the same as other Teenagers and even want to be like them.

I feel very happy to meet children and people from age groups and learn from them when they come to congratulate me or even to take selfies whenever I visit a program as a special guest. I always like to meet people because of their blessings which is the only thing that works on the Top of the Mountains for my safety. My father is always behind me to take care about my activities.

17. What is Mission7 summit and what is the message behind this mission?

A. Climbing all the highest peaks of 7 continents is known as Mission7 Summit, and to add to that I am also attempting for Grand Slam record in which I will be reaching the farthest points of the globe “The North Pole” and “The South Pole”.

The main message behind climbing all these peaks is very simple. As a mountaineer we would like to know how much we have conquered ourselves and this challenge is the ultimate for any human being to take up.

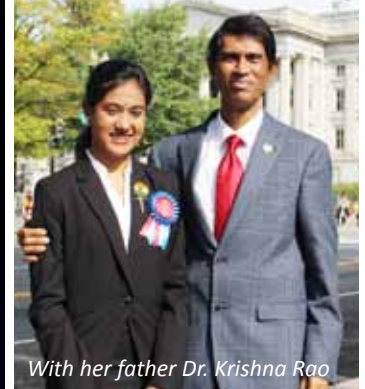
18. How do you manage your studies and mountaineering together?

A. I have recently graduated 10th class. Studies have never been a barrier for anything I have done. While travelling I would carry my books along with me, revise during my journey and whenever I get chance I study my subjects online.

19. What are your current engagements and activities apart from mountaineering?

A. Apart from Mountaineering, I generally take care of the Training part for children in Adventure sports and Fitness, so I have a unique program known as “FitVenture”, which is a combination of Fitness and Adventure under the brand JanJay Adventures. I also work for Girls empowerment and see that not only every girl child is being educated but also given proper life skills for them so that they can stand on their own and live for what they want to be under JanJay Foundation. I regularly visit some orphanages nearby and spend time whenever I am in the city and try to explain their studies or play with them and chat.

20. You deliver talks and motivational lectures on several forums. What is your key message when you speak?



With her father Dr. Krishna Rao

A. I talk about my main mission ‘Girl Empowerment’ which I am working for and what Indian girls can achieve if we are given proper guidance, encouragement and support.

The key message is about my tagline which is basically my life’s mantra ‘Adventure without Risk is Disneyland’, I give the example of the ECG reading for my tagline because it has a lot of meaning behind it and explains it to them to the point. When the readings go up and down that is when it is

If physiotherapy becomes a part of every person’s life, then injury levels will come down.

the indication that the person is alive. If the reading is a straight line it indicates no life in the person. Even our lives go the same way. If we have ups and down we know where we stand, how much hard we are working. If we don’t face any problem then we are doing nothing and we haven’t got any sharp vision of what we are doing.

The other key message is about dreaming with open

eyes and believing in you. Yes, we all dream in our sleep but, dreaming our life’s goal and achieving is what makes us different.

21. Your message to the physiotherapy fraternity.

A. Firstly, I salute all the physiotherapists as they are one of our backbone, without whose support no sports person can be safe and fit. Secondly, if physiotherapy becomes a part of every person’s life, then injury levels will come down. It should be introduced from the school level, so that the students who are planning to take up sports in their coming future can understand the importance of physiotherapy and take its support for becoming a better sports person.

Jai Hind.

Jaahnavi Signing out





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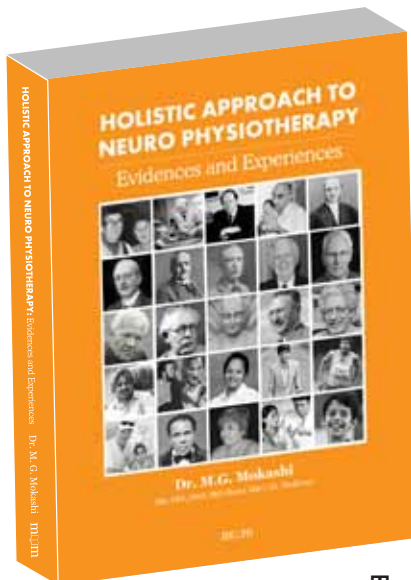
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Social Support

The key to Rehabilitation Adherence

Rehabilitation adherence is an outcome of a complex interaction of physical, social, therapeutic and psychological elements. In a previous article, I had discussed the central role of therapeutic relationship in facilitating rehabilitation adherence. This second article, based on the findings of my doctoral research, centres on the role of social support and other social influences as a determinant of rehabilitation adherence.

Devdeep Ahuja
PhD, MCSP,
Co-founder
HEducate, UK



During the last 30 years, researchers have shown great interest in the phenomena of social support, particularly in the context of health. Social support has been described as “support accessible to an individual through social ties to other individuals, groups, and the larger community.”

It has also been described as “a network of family, friends, neighbors, and community members that is available in times of need to give psychological, physical, and financial help”.

Theoretical models of social support specify the following two important dimensions: (1) **a structural dimension**, which includes network size and frequency of social interactions, and (2) **a functional dimension** with emotional

(such as receiving love and empathy) and instrumental (practical help such as gifts of money or assistance with child care) components.

For the purpose of my research, social support included both the structural elements (e.g. did the patient have any family or friend who could provide support if required or the level of social obligations) and functional element (e.g. the level of positive reinforcement or feedback available or does the patient have anyone to provide financial support if required). The findings from my mixed methods research indicated that greater social support had a Grade II evidence of a positive relationship with

attendance and Grade I evidence of positive relationship with home exercise adherence.

My research project included an initial mixed methods synthesis of qualitative and quantitative studies exploring determinants of attendance, in-clinic adherence and home exercise adherence in outpatient musculoskeletal physiotherapy clinics. This was followed by a prospective cohort study and then a qualitative study incorporating focus groups and interviews with patients, reception staff, physiotherapists and clinical managers to discuss and elaborate upon the findings. Finally, a triangulation protocol was used to combine the findings from

the previous three stages to develop conceptual models and levels of evidence tables for each of the 136 determinants explored.

Social obligations

Patients and physiotherapists both concurred that a conflict with a patient’s regular schedule and commitments was one of the most important factors which influence their decision to not attend an appointment. These obligations included inability to take time off work, needing to care for family members and children, or other social commitments.

Participants felt that they had to prioritise their

activities and sometimes attending physiotherapy did not seem important enough when weighed against other obligations.

“Physiotherapy is time consuming and that patients need to alter their daily routine or take time off from work, family or social obligations to attend the department for treatment which may be difficult for some patients” (Second order) (Marwaha, Horabin and McLean 2010)

Society perceives time as a commodity and prioritising time for rehabilitation and exercises is one of the main considerations in achieving adherence to the exercise program. Willingness and ability to accommodate

exercises into their daily routine, developing fixed times for exercises and being disciplined, greater level of organisational ability if the time is limited were considered to be possible facilitators of exercise adherence. Exercises which can be completed as a part of recreational activities or other activities of daily routine may promote adherence. The physiotherapists should also respect the schedule of patients when planning exercises.

“... So I’ve been setting time limits, as you stated [name], in my daily planner about when to make it a priority, when I can put it in, trying to work my life around it.” (patient, first order) (Wilcox et al. 2006)

In itself, social obligations may appear to be an unmodifiable determinant of adherence.

However, my research has demonstrated that: a) if the perceived need is high, and b) the exercise programme is patient-centred i.e. takes into account their social obligations and exercises can be fit into the daily routine of the patient, then patients are more willing to prioritise their physiotherapy program over their social obligations and adhere with exercise recommendations.

Patients and physiotherapists both concurred that a conflict with a patient’s regular schedule and commitments was one of the most important factors which influence their decision to not attend an appointment.

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Beyond the immediate family and friends, patients also enhance their support structure further by forging relationships with their peers or exercise partners.

Thus a discussion between the physiotherapist and patient at an early stage to identify the interests of patients, short and long term goals and tailoring of the intervention to attain those goals may facilitate prioritisation of their physiotherapy program over their social obligations. An example of such intervention is the Brief Advice which is being provided as a part of Scotland's new physical activity pathway. Brief Advice consists of a short (~3 minute), structured conversation with the patient aimed at raising awareness of the benefits of physical activity, exploring barriers and identifying some solutions. Similar approach may be developed and tested for therapeutic exercise as well. Frequency of sessions, duration and number of exercises need to be optimised to ensure that patients can stay motivated by results, are able to adapt

exercises into their daily routine and thus overcome the barrier of managing exercises while they still fulfil their social obligations.

Support from family, friends, peers and exercise partners

Many patients are dependent on the material, emotional and practical support from their family members. Encouragement from family members and friends provides a stimulus to continue with the exercise program. External cues and reminders to exercise along with an acknowledgement of the patients' physical limitations, facilitates adherence to the exercise program. A lack of such support acts as a barrier to the continued engagement of participants with the rehabilitation process.

"Oh, the support I got from my family and friends was great. My husband has been fantastic watching over me making sure I don't do anything I shouldn't. My best friend sometimes came to the rehab centre with me which I really appreciated" (Carol, first order) (Levy et al. 2009)

Beyond the immediate family and friends, patients also enhance their support structure further by forging relationships with their peers or exercise partners. Having an exercise partner with similar abilities allowed them to share their anxieties and goals and discuss disease related issues. Apart from sharing

information, it also provided social benefits of companionship while exercising, thus making it more enjoyable and acceptable.

Exercising in groups also facilitated competition and drive in some participants who wanted to do better than their peers. Patients also tend to be motivated by hearing the success stories from other patients who have undergone similar treatment.

"I meet a lot of different people ... and it's amazing how quick you can form a relationship with people that you have never met before. And it's a great way to share time with other friends." (patient, first order) (Wilcox et al. 2006)

Support provided by coaches in the form of understanding the athletes' injury, recovery and rehabilitation process was considered vital to their engagement in exercise programs. If a coach considered the recommendations of physiotherapist to be worthless, then there was little chance of the athlete's continued participation.

Conversely, if the coach was also included as a part of the multidisciplinary team who understood and encouraged rehabilitation, this promoted adherence to rehabilitation. The coaches' understanding, approval and support for the treatment program recommended by the therapists' was considered to be an important factor in whether athletes adhered to their exercise regimen.

“Sometimes you will get a coach who will come in with the athlete and that’s fantastic because you can discuss everything with the coach and athlete and get agreement on what he can do. Its good to have coach on your side and to work as a team.” (Physiotherapist, first order) (Niven 2007)

It has also been shown that providing social support to others may result in health benefits to the individual providing support as well. Peer support among patients with the same chronic health problem combines the benefits of both receiving and providing social support. Previous research indicates that peer support may lead to improved adherence for medication diet, and exercise.

The success of peer support appears to be due in part to the non-hierarchical, reciprocal relationship created through the sharing of similar experiences with others undergoing the same medical and/or behavioural tasks and challenges. Physiotherapy departments should consider promoting such peer support or ‘buddy’ systems to facilitate support amongst patients and thereby facilitate HEA. Personal health beliefs and cultural exercising norms

Many patients are dependent on the material, emotional and practical support from their family members.

of patients are also strongly influenced by their family and friends (Sher et al. 2014). Physiotherapists should therefore endeavour to identify the important people in patient’s life, examine their role in patient’s beliefs and attitudes and evaluate their extent of support for maintaining patient’s HEA (Lanoutte et al. 2009). This may also facilitate a discussion about a patient’s social obligations, priorities and consequent need for prioritising HEP within the daily routine.

There may be occasions where despite best intentions, a patient may not be able to attend the appointment due to social obligations or other urgent priorities. In such situations, it may be useful to provide more accessible rescheduling and cancellation procedures which may include use of text messages or emails, online calendars or social media websites such as Facebook or Twitter. Promoting cancellation of appointments within a timeframe which allows physiotherapy departments to re-allocate the appointments may be useful to ensure appropriate utilisation of resources.

Recent evidence has suggested that while there is recognition of contribution of the psychosocial elements to a patient’s experience, it is not regularly addressed by the physiotherapists in



clinical practice. This has been attributed to lack of adequate training of the psychosocial issues within entry level as well as post qualifying programs (Foster and DeLitto 2011) as well as following the traditional biomedical model of care in clinical practice, which then influences their clinical reasoning and decision making as well as the explanations provided to the patient.

Foster and DeLitto (2011) have suggested several strategies which can be utilised within the entry level programs to facilitate greater focus on the psychosocial elements within physiotherapy practice including a specific focus on integrated biopsychosocial models within entry level education and greater inter-professional education.

Exercising in groups also facilitated competition and drive in some participants who wanted to do better than their peers.

Summary:

The findings regarding the impact of social support on rehabilitation adherence from my study have emphasised the need for physiotherapists to be cognisant of and work within the bio-psychosocial paradigm and consider not only the patient and their presenting problem, but also the social environment within which they live and function to ensure that the rehabilitation programs are designed with their social obligations in mind, additional support, encouragement and education is provided to patients and their significant social influencers to facilitate adherence to the exercise programs.

Acknowledgement: The above article is based on the findings of my PhD study titled ‘Determinants of Rehabilitation Adherence in musculoskeletal physiotherapy: a mixed methods project’ funded by Sheffield Hallam University, United Kingdom (2011-2015)



The latest in

TENDON REHABILITATION

In the previous edition I have covered the basics of the tendon including the biomechanics, patho-mechanics and the continuum of tendinopathy, its time now to shed some light on tendinopathy treatments.



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Senior Clinician,
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Community Health
Australia

Management aim

An argument for high tendon load as one of the key components of a successful tendon rehabilitation program has always been raised.

One of the key goals of rehabilitation should be to increase tendon stiffness, as this will increase the tendons ability to withstand repeated stretch-shortening cycle loading and overuse injury.

It seems to be a clear suggestion that high load is probably more likely than bodyweight exercise to increase tendon stiffness. There is some evidence that tendon responds more to heavy rather than lighter rehabilitation loads.

If the injury is identified in the early stages (reactive tendinopathy or early tendon disrepair) then load management/reduction will allow the tendon time to adapt and recover.

Use of NSAIDs may be beneficial at this stage, as their ability to impede healing can reduce abnormal adaptation.

In degenerative stages exercise appears to be a positive stimulus for tendon restructuring.

Exercise is the most evidence based treatment for tendinopathy - tendons need to be loaded progressively so that they can develop greater tolerance to the loads that an individual

needs to endure in their day-to-day life.

Heavy-load eccentric calf muscle training for the treatment of chronic Achilles tendinosis - Over time the benefit of Alfredson's eccentric training program has been attributed to the mode of contraction (i.e. eccentric) rather than the load.

When performing eccentric training with bodyweight it is more of a muscle stretch than tendon specific intervention, and this may be sufficient for some patients (perhaps those that are very tight).

If we apply heavy load slowly, as in a heavy slow resistance regime, or heavy

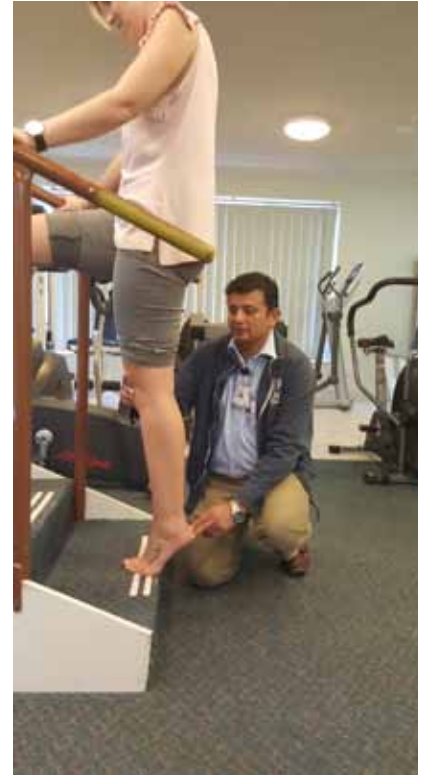
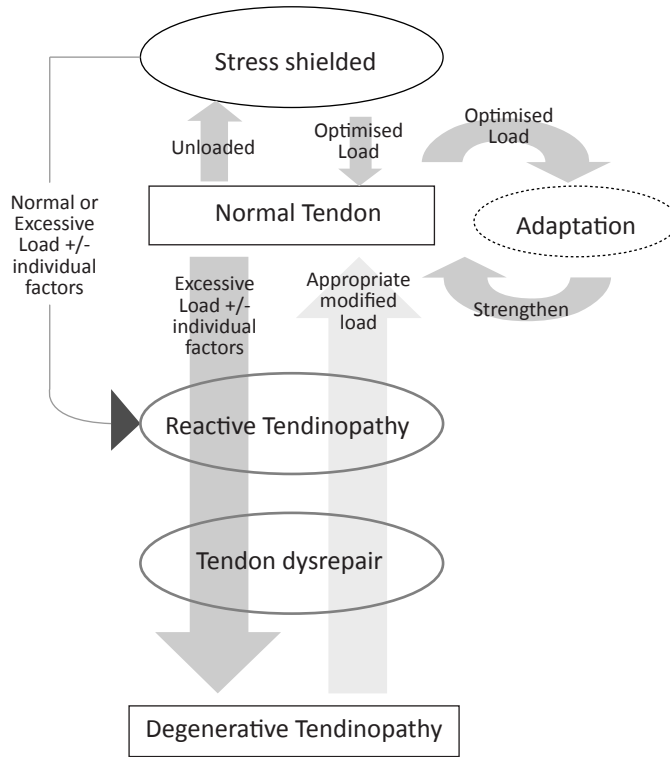
isometric load over a number of weeks the tendon will adapt. This is mostly measured by looking at tendon stiffness under load. The tendon becomes stiffer, i.e. it strains less under a given load.

Eccentric rehab may well still have a role but isometric exercise has been introduced to reduce pain and Heavy Slow Resistance training is arguably the first choice at present for building strength and load capacity.

The current evidence suggest that slow and heavy loading is good for tendons – especially the big, strong, powerful tendons of the lower limb.

Tendon is a constantly evolving structure with its strength predominantly coming from collagen molecules. When you perform exercise (such as running/jumping) the collagen in the tendon undergoes a process of both breakdown and regeneration.

Over the first 24-36 hours after a bout of exercise there is an overall loss of collagen. Less collagen means less tendon strength, hence leaving the tendon vulnerable to damage. After 48 hours however (if no further exercise has taken place) there is an overall gain in collagen and therefore strength. This is one of the reasons that physiotherapists would suggest 48 hours rest between loading exercise sessions.



TENDINOPATHY REHAB PROGRESSION

Phase of rehab	Aim	Treatments
1	Reduce pain	Isometrics in mid range Reduce Compressive load and use of SSC Ibuprofen (if reactive)
2	Improve strength	Heavy slow Resistance Training in non-compressive position
3	Build functional strength	Progress strength work into more functional tasks. Treat movement dysfunction
4	Increase Power	Reduce reps but increase speed of muscle contraction to build power
5	Develop Stretch-Shortening-cycle (SSC)	introduce plyometrics +/- graded return to running
6	Sport specific	Add drills specific to requirements of sport
Maintenance	Maintain optimal tendon health	Continue strength work, gradual increase in loading. Avoid training error.

The latest concept is Tendon Neuroplastic Training or TNT...

It builds on current thinking to improve motor control as well as improving tendon load capacity. It's developed by Ebonie Rio and a great team of tendon experts.

Cortical inhibition has been reported to be a feature of tendinopathy. In simple terms this means the area of the brain that controls the muscle (the motor cortex) isn't functioning properly. It needs to find a balance between excitation and inhibition and in tendinopathy this balance is thought to be altered.

TNT adds external pacing to tendon rehabilitation exercises using a metronome to improve motor control and help restore this balance.

A contraction speed of 3 seconds for the concentric component, followed by 3 seconds for the eccentric has been used successfully in tendon rehab.

Conclusion - Tendon Neuroplastic Training (TNT) is an exciting new concept that builds on previous tendon research. It involves using a metronome to externally pace rehab exercises and can be used as part of an active self-management programme.



What else is being used to manage tendinopathy?

There are other old and new interventions / modalities in practice but none of them have come out with strong evidence to be recommended in the management of tendinopathies. Few of them are mentioned below along with their current level of evidence.

Corticosteroid Injections:

Current knowledge suggests that inflammation plays much less of a role in tendinopathy than originally thought. One hypothesis for their proposed efficacy is that the degenerative change seen within affected tendons causes an inflammatory response in the surrounding tissue that may contribute to pain and swelling seen in cases of tendinopathy.

In this setting, steroids would serve to offer symptomatic relief. Recent literature seems to support the above, with the literature often showing short-term improvements only in symptoms with few long-term benefits.

Extracorporeal Shock Wave Therapy:

The use of extracorporeal shock wave therapy to address the failed healing response of a tendon is a new concept. The rationale for the clinical use of extracorporeal shock wave therapy is stimulation of soft-tissue healing and inhibition of pain receptors. Proposed mechanism of action is disruption of neo-neuralization found in tendinopathic tissue that may be linked to symptomatic pain.

There is no consensus on the use of repetitive low-energy extracorporeal shock wave therapy, which does not require local anaesthesia, versus the use of high-energy extracorporeal shock wave therapy, which requires local or regional anaesthesia.

Low-level laser therapy (LLLT)

There is no consensus about the use of low-level laser treatment for tendinopathies. And a number of questions remain unanswered, like LLLT's role when used in combination with other interventions, and especially exercises, in the remodelling phase of the tendon repair.

Iontophoresis and Phonophoresis

Iontophoresis and phonophoresis involve using ionizing current or ultrasound to deliver medications locally. Corticosteroids and NSAIDs are commonly used with these modalities. Both are widely used and anecdotally effective, but well-designed RCTs are lacking to permit reliable recommendations.

Friction massage

Friction is defined as "an accurately delivered penetrating pressure applied through fingertips". But there is currently little evidence available to support the use of it in the treatment of tendinopathy. A Cochrane review evaluating deep friction massage found no benefit with deep friction massage over other treatments.

Therapeutic Ultrasound

Therapeutic ultrasound is commonly used in the treatment of tendinopathy. Despite this, there is little clinical research documenting the efficacy of ultrasound in treating tendinopathy or promoting tendon healing. In the era of evidence-based practice, further studies, especially randomized control trials are essential in



elucidating the efficacy of therapeutic ultrasound in promoting tendon healing and treating tendinopathy.

Platelet rich plasma (PRP) – Blood injections –

Growth factors in PRP are thought to promote tendon healing. Factors in platelets have been found to play vital roles in stimulating processes in the maintenance and repair of tendon tissue. PRP stimulates tendon cells and it's unclear whether this is positive, healing is not supported by evidence.

A recent systematic review found there was strong evidence to suggest PRP is no better than placebo/control in tennis elbow. In good quality studies it does NOT seem to perform better than placebo. Further study with additional high-quality randomized, controlled trials is necessary.

Overall Conclusion:

- A reasonable first line of treatment for tendinopathy should include a course of NSAIDs and eccentric exercise-based physical therapy.
- Corticosteroid injections seem to offer excellent short-term pain relief but lack long term efficacy.

- Alternative injections, such as PRP, have shown short-term efficacy for tendinopathy sufferers.
- Operative management seems to offer some benefit in symptomatic relief but carries a higher complication rate than other treatment options and should be reserved only for patients' recalcitrant to other more conservative options.
- Reduce load to a tolerable level to avoid constant symptom exacerbation. Then gradually increase it again as symptoms, and rehabilitation, allow.
- Target rehabilitation to gradually build up the ability for the tendon to tolerate load in the functional aggravating activities. This may also include range of movement exercises in addition to the obvious strength/loading exercises.

My favorite one **liner for all the clinicians** – **“Trust it, Load it and the body will adapt”**

Clinicians can contact the author for references or any further details or questions on pariveshk@gmail.com

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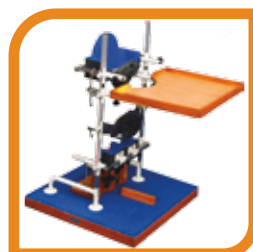
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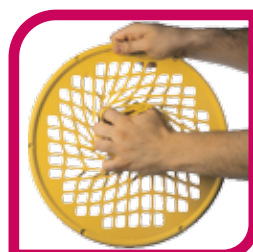
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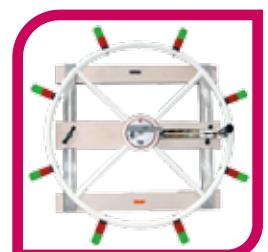
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Handy Reacher Length - 26"



1103-002
Hip Kit



1106-002
Writing Grip



1107-001
Adjustable Head Pointer

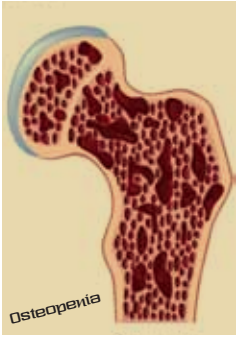
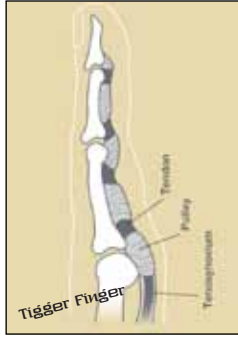


1108-001
Bendable Spoon

DRY NEEDLING

By: Saachi Varyani, Simoni Shah, Diana Pinto

Benefits in conditions which have no defined Treatment approach



Dry Needling is an invasive form of treatment useful for treating Neuromusculoskeletal and Fascial conditions. Much has been said about Dry Needling to help improve Myofascial Pain syndromes through the release of Myofascial Trigger points (MTrP's). However Dry Needling can be used to improve a multitude of other conditions that have less defined approaches to treatment.

There are a multitude of conditions where in Dry Needling has not been attempted as yet. This article attempts to shed light on conditions that could possibly benefit from Dry Needling. Current research is underway at our clinic to determine the effect of Dry Needling on a host of other conditions.

The conditions benefiting from Dry Needling mentioned in this article are:

1. TRANSVERSE MYELITIS
2. CALCIFIC SUPRASPINATUS TENDINITIS
3. TRIGGER FINGER
4. SUPRAPATELLAR BURSTITIS
5. OSTEOPENIA
6. OSTEOARTHRITIS KNEE

1. TRANSVERSE MYELITIS

Female, 52 patient using walker came to our facility with H/o transverse myelitis since 14 years at L1 level and complaints of Left limb disability.

H/o: Bilateral lower limb paralysis with pain/ stiffness in lower back, loss of bowel and bladder sensation. Medication normalized her bowel/bladder sensation and Right lower limb function, but not her Left lower limb function.

C/o: Severe pain in left buttock, inability to walk without walker, dependent on husband to move around, dragging of Left foot. Patient unwilling to start treatment since she was aware that transverse myelitis has no cure.

O/e: 1. Right Dorsiflexors 3 +, Left knee extensors 0, Left leg dorsiflexors 1, Left leg knee flexors 1

2. Right thigh girth 22 inches, Left thigh girth was 17 inches (At 10 inches above upper patella)

Rx aimed at: Correcting SIJ dysfunction, Left Dry Needling Quadriceps & Left Tibialis Anterior/ Peronei – Following which Strengthening to Gluteals was initiated. OSSUR Brace given to left knee, Talar-made Orthotics given to both feet according to evaluation. Patient treated once a week for 6 months.

Clinical Findings: Post 6 months, Left Thigh girth is at 20 inches. Left Quadriceps Strength is 2+. Patient can feel her Left Quadriceps muscle recruit during Contraction. No buttock pain, SIJ dysfunction persists. Patient now walks with a stick independently.

2. SHOULDER ROTATOR CUFF/ SUPRASPINATUS CALCIFIC TENDINOPATHY

It is a condition that causes formation of calcium deposits within the tendons of the rotator cuff. In addition to irritation and pain, the calcium deposits reduce the space between the rotator cuff and acromion, affecting normal shoulder motion & causing subacromial impingement.

C/o: 5 patients between 30 - 50 years with Pain in terminal range of shoulder motion (flexion and abduction), Pain and severe restriction in shoulder internal rotation.

Rx: Dry needling to Supraspinatus, Deltoid, Biceps, Triceps, coracohumeral ligament, Subdeltoid Bursa, Pectoralis Minor, Coracobrachialis, Infraspinatus, Subscapularis, Teres Minor, Rhomboids, Latissimus Dorsi, Scalenes, Upper Trapezius. Periosteal pecking of the Greater Tubercle also done.

Upon return of Shoulder ROM, shoulder strengthening program was initiated. Patient treated twice a week for 4 months.

Findings in USG Shoulder:

Along with the reduction in size/ resolution of calcific deposits, other USG findings included - Increase in Supraspinatus muscle bulk, Improved Swing & Fibrillar pattern of Supraspinatus tendon (In Dynamic evaluation). Clinically, patients are pain free with full range of shoulder movement and return to strength.

3. TRIGGER FINGER (STENOSING TENOSYNOVITIS)

Inflammation of the tenosynovium narrows the space within the tendon sheath of the afflicted finger. This painful inflammatory condition therefore causes the finger or thumb to catch or lock when flexed.

Repeated and strong gripping movements accelerate the inflammation process.

C/o: Female patient, 55 years old presented with severe pain and inability to bend her Right middle and ring finger. She felt that her finger got 'locked in a Spiderman position' during bending. She had no Neural complaints.

Rx: Dry Needling to Tenosynovium of Right Middle and Ring finger tendons along with Needling to Palmar fascia and Palmaris Longus. Patient was treated for 3 sessions.

Clinical findings:

Complete reversal of condition, with no loss of hand grip strength & with no symptomatic reoccurrence for 3 months.

4. SUPRAPATELLAR BURSAL EFFUSION (Suprapatellar bursitis/Prepatellar bursitis)

A Bursa communicates with the cavity of the knee joint and is pathologically distended with blood or synovial fluid after a trauma. Patients complain of feeling of swelling around the knee joint, pain in bending the knee, pain during weight bearing.

C/o: Male patient, 62 years old complained of on and off Right knee swelling since past five years in the prepatellar region, accompanied sometimes by knee pain on the medial side or by back stiffness.

MRI suggested suprapatellar bursitis with 68 cc

of fluid collection at the start of treatment. All previous treatments to treat this bursitis had failed.



Rx: Treatment included Correction of SIJ dysfunction along with Needling to VMO, Rectus Femoris, Vastus Lateralis, Vastus Intermedius, Hamstrings, Adductors, Gluteals and Suprapatellar Bursa. As the bursal swelling started to reduce, Gluteal and Core strengthening program was initiated.

Clinical findings: Patient has no pain in knee joint and no back stiffness. The bursal swelling has reduced significantly. A Minor thickness above the knee joint remains, evidence of the thickened bursal wall perhaps? USG findings are awaited.

5. INCREASED BONE MASS IN OSTEOPENIA

Known C/o: Male, 45 years old with a long standing SIJ issue complained of constant back pain and stiffness. He also complained of Left wrist pain which seemed to be getting progressively worse. Strength of Core muscles, Lower limb, Gluteals, Upper limb & Shoulder blade musculature was checked prior to start of treatment.

Rx: Dry Needling done to Gluteals, Lumbar Multifidi, Iliopsoas, Quadratus Lumborum, Latissimus Dorsi, Piriformis, Tensor Fascia Lata, Iliotibial tract, Rectus Femoris, Hamstrings, External/ Internal Obliques, Rectus Abdominis. Patient was seen once or twice a month for 12 months.

As pain/stiffness levels progressively improved, patient was requested to get a Bone Scan. Core Strengthening was initiated thereafter. Patient had no change in diet during this time. Patient did not take Calcium or Vitamin D supplementation during this period despite being recommended to do so.

DEXA Scan and Clinical

Findings: Patient had significant improvement in his SIJ dysfunction with improvement in pain levels/strength/function of back and hips.

- DEXA for Spine, Hip and Distal forearm in April 2016 showed an overall T score of -2.5.
- DEXA for Spine, Hip and Distal forearm in April 2017 shows: Increase in bone mass at the spine and the hip with reduction in bone mass at distal radius (Note that No Dry Needling was done for the Distal Radius musculature). T score at Spine and Hip is currently -1 with no improvement at wrist.

6. TIBIOFEMORAL AND PATELLOFEMORAL ARTHRITIS (KNEE OA):

C/o: 20 cases of Tibiofemoral and Patellofemoral Knee Osteoarthritis, both Male and Female between 35 – 60 years age.

Rx: Dry Needling to Gluteals, Quadriceps, Adductors, Hamstrings, Gastrosoleus, Tibialis Anterior, Peronei, IT Band, Gemelli/Obturator, Piriformis, Quadratus Femoris.

Clinical/ Radiograph

Findings: Patients showed improved rates of Pain perception, improvement in ROM of knee, Knee joint function as well as improvement in Knee Joint Space width was also seen. There is extensive



Fig.: Osteoarthritis Tibiofemoral and Patellofemoral joints before and after Needling

research on the Improvement of Knee Joint Cartilage, but no study till date that focuses on Knee Joint Space width improvement. Our current efforts are directed to Reversal of Osteoarthritis and Improvement of Joint Space width in patients with OA Knees.

IN CONCLUSION:

The reasoning behind how Dry Needling works in the above conditions is yet to be defined. However improvement in the recruitment and muscle control timing/ muscle co-ordination seems to be the benefit obtained through Dry Needling in most Neuromusculoskeletal conditions. It is evident through the limited literature on Dry Needling that it promotes Neuroplasticity through Closure of the Pain Gate Mechanism. Through ongoing research, we hope to provide answers to why Needling would help reverse some of the above mentioned conditions.

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(The authors are currently publishing journal articles for the Effectiveness of Dry Needling in the above mentioned conditions. All patients mentioned in article have given prior consent to treatment.)



CUPPING

An old wine in a new bottle

"That's been the secret that I have had through this year that keeps me healthy," said American gymnast Alexander Naddour, USA Today reports. "It's been better than any money I've spent on anything else."

Cupping has become popular after Rio Olympic, though it is an ancient mode of treatment.

Micheal Phelps has made Cupping common to recent practitioners after his Cupping marks came into media in 2016 Olympic, although it is a several thousand years old treatment. It was a media event when Phelps swam with circular, eye-catching bruises. The American Gymnastic team also used cupping for their better performance.

Origin - Cupping has been used in China and some parts of the African countries for several thousand years, it is difficult to tell in which country was its origin. Cupping was not the earlier name, it was known as 'horn therapy' as it was applied with cattle horn.



Negative suction inside the horn was created by the cupping practitioner. It was then replaced by the bamboo and then by the glass cups. Cattle horn are still in use in

some parts of Africa to expel poison from bites. When cattle horn was replaced by the glass cups, fire came into the picture to create negative energy and expel the air.

The earliest record of cupping is in **Bo Shu** (an ancient book written on silk), which was discovered in an ancient tomb of the Han Dynasty in 1973 (Chen Bin, Dr He Chong, personal communications, 1995). Some therapeutic cupping method were also introduced in a book by Zouhou Fang in about 28 AD (Chen Bin, Dr He Chong, personal communications, 1995). Cases of treatment of tuberculosis were recorded in Weitaimiyao in 755 AD.

Three hundred years later, another ancient classic, Susen Liang Fang, recorded an effective cure for chronic cough and successful treatment of poisonous snake bites using cupping therapy. (Chen Bin, Dr He Chong, personal communications, 1995).

About 500 years ago, a famous surgeon called Wei Ke Zen Zong presented a detailed record of the cupping methods used in surgical practice (Chen Bin, Dr He Chong, personal communications, 1995)¹. It also developed a lot in Jin Dynasty (265 - 420 AD) with evidence based practice. In this period cattle horn, bamboo, different sized cups were used as per the requirements. In 1950s the clinical efficacy of cupping was confirmed by further research

in China and acupuncturists from the former Soviet Union, and was established as an official therapy practice in hospitals all over China.¹

It became popular all over the world. It was widely used by army personnel of Egypt. William Marsden (1796 – 1867) started cupping therapy in his Royal Free hospital of London, where skilled doctors and surgeons used cupping therapy for benefit of the patients.

It is known as **Hejama or Hijama** in the middle east countries. Prophet Muhammad said, *"Indeed the best of remedies you have is hijama, and if there was something excellent to be used as a remedy then it is hijama"*². In Arab countries, cupping was applied in different locations and at different times as per the patient's requirements. The time was selected as per the lunar position.

Who can practice?

There is no regulatory board for controlling the practice of Cupping. British Acupuncture Council tries to regulate the practice in UK. In USA also, there are registered practitioners who use Cupping therapy, even then there is no hard and fast rule for practicing Cupping. Medical practitioners, Acupuncture practitioners, Physiotherapists and Surgeons can practice Cupping. There are so many spas where beauticians use cupping as a mode of relaxation.

Types and Methods:

There are thirteen different methods of application in cupping. Most of these methods has been postulated by ILKAY ZIHNI CHIRALI in his career.

Previously there were dry cupping, flash cupping, moving cupping, needle cupping, herbal cupping & water cupping. He added weak cupping, medium cupping, strong cupping, moxa cupping & Ice cupping. Recently Physiotherapist are using Myofascial Cupping and Sports Cupping.

I. WEAK CUPPING:

Weak cupping, also known as *light cupping*, can be applied in all parts of the body. It increases the blood flow and is also known as *tonifying method*. It can be applied for 30 minutes. Slight reddening of the skin happen.



Indications - Cough and cold, Sore throat, Asthma, Anemia, Multiple sclerosis, Tonsillitis, Fatigue, Cancer patients.

2. MEDIUM CUPPING:

This method is frequently used. This cannot be applied to children below 7 years. The suction is firmer than weak cupping. Medium cupping cannot be used for more than 30 minutes, otherwise it will drain the patient's Qi and the patient will feel extremely lethargic.

Indications - Hot or cold 'Bi' syndrome, Headache, Stress, Sports injuries and musculoskeletal pain, Tremors and fits, Infertility



3. STRONG CUPPING:

This method is also known as draining method. Blood and internal wind are the target for strong cupping. Significant amount of blood and Qi is manipulated from this method, so the patient should be stable enough to be treated by this method.

The main aim of this type of cupping is to eliminate the internal pathogen. Red visible marks can be seen after strong cupping, which will be visible for upto 15 days after the application. The duration of cupping should be short, 3 to 5 min in the first session and can be increased to a maximum of 20 minutes in a single session.

Indications: Hypertension, Headache, Internal organ heat, Boils, Muscular cramps, Sports injury, Low back pain, Upper & lower limb radiating pain.



4. MOVING CUPPING:

This is also another draining method. It draws out more blood than fluid and Qi. Moving cupping covers a larger area and patient should have a strong Qi before being treated by this method. This is the most painful form of cupping.⁴

Indications: Acne, Skin lesion, Inflammation, Neurological conditions like post-stroke weakness, Paralysis, Excess heat condition, Febrile disease, Muscle & Tendon relaxation, Sports injury, Cellulite, Weight loss program.



4a. LIGHT-MOVING CUPPING:

This can be used with glass, rubber or a silicon type cup. It is same as moving cupping but the suction intensity is less here. It is used in those patients who feel very weak or lethargic with moving cupping and is generally used for old age patients and children. Moving & light moving cupping both leave a pinkish mark on the skin.

Indications - Old and frail patient, Infertility, Cancer patients, Immune deficiency syndromes, Edema, Lymphedema, Stress release, Stomach pain.

5. EMPTY/FLASH CUPPING:

Flash cupping is a technique used to apply suction to the skin in short intervals or 'flashes'. This means that the cup is placed on the skin for approximately 5 seconds before the pressure inside it is released and it is taken off again.

This is repeated along the patch of skin that has been selected for treatment. It is also known as *empty cupping* as suction is given at intervals. So in between two suction, there is an empty period.



Indications - Digestion and Gi Problems, Tiredness & Emotional Distress, Good for Children, Common Cold and Fever, Facial Treatment & Cosmetic purpose.

6. BLEEDING/WET/ FULL CUPPING:

This is a draining cupping and was most popular in the ancient time in Middle East & European countries. This method is the fastest to give relaxation to the patient. Toxic substances in the form of blood seem to purge out from the patient's body. In a single cup, 20 ml to 100 ml of blood can be drawn out in about 5 minutes of maximum time. It is better not to apply it more than 5 minutes. Prior to applying cup make the channel for blood to come out.

There are 3 way to make incision:

1. Surgical blade
2. Dry Needle
3. Plumblossom needle



Among all this, plumblossom needle is the most popular and dry needle is the least popular, as plumblossom needle makes channel in no time whereas dry needle takes long time for making channel. Make several incision in shorter period of time & remember about the bleeding time (1 to 9 min) & clotting time (8 to 15 min). So the whole process should be completed within 9 to 15 min.



Indications: Asthma, Shortness of breath, Hair loss, Skin purpura, Frozen shoulder, Hemiplegia, Eczema, Acne, Gout, Blood stasis, Blood poisoning, Hypertension, Sports injuries, Insect bites, Fibromyalgia.

7. MOXA CUPPING & HOT NEEDLE CUPPING

This is also known as *tonifying method*. Moxa is obtained from dried leaves of mugwort plant. It can be found in loose type, smokeless charcoal type, round, long, cigar shaped long type and smokeless dry cut form. Dry cut form fits into needle handle. Moxa rolls are divided further according to their strength like medium moxa, hot moxa and very hot moxa. Hot cupping can be divided into hot needle cupping and moxa cupping, where needle is not used.



Indications - Asthma, Spleen or stomach cold type patterns, Wind-Cold Bi syndrome, Cough, Anemia, Infertility, Impotence, Low back pain, Dysmenorrhea

8. HERBAL CUPPING:

Natural herbs are used here along with cupping method. Patient's condition will determine which herbs should be used. It can be further classified into:

- a. Bamboo cupping
- b. Herbs in the cup

a. Bamboo cupping - Here bamboo cup is boiled for 30 minutes with herbs, prior to applying. There may be chance of burns and blisters after application of hot bamboo.



b. Herbs in the cup - Herbs are prepared separately and poured at the time of cupping. Suction should be medium if practitioner uses herbs in the cup.



Indications - Joint stiffness and pain, Bed wetting of the children, Asthma, Infertility, GI problems, Emphysema, Cough, General relaxation purpose, Incontinence, Neck & shoulder pain

9. WATER CUPPING:

Water cupping treatments require a highly experienced practitioner. This method involves the very quick and dexterous application of a glass or bamboo cup filled with one-third full warm water, without spilling the water. It is not so popular and



it requires very expert hands, and moreover the therapeutic effect is less for this type of cupping.

Indications – Asthma, Dry skin, Rheumatism, Localized swelling, Pain

10. ICE CUPPING - Ice cupping is not TCM, it is a very new method and was first started by a Physiotherapist. In TCM it is said that “cold is death”, so ice cupping is against the principle of TCM, but it is giving excellent outcome in sports injury patients as well as other patients. It gives anti-inflammatory effect and it reduces pain efficiently.



Indications – Joint pain, Sports injuries, Traumatic injuries, Muscular pain accompanied by heat pattern.

11. NEEDLE CUPPING:

Needle cupping is used to remove excess pathogen as well as reduce pain. This releases the active trigger points and also the muscles. Needle size (0.5-1 inch is safe) depends as per the need. Insertion of needle followed by the application of the cup. Total treatment time may vary from 10 to 20 minutes. Some blood may purge out during this process. There should be needle clearance after application of cup.



Indications - Arthritis (Osteoarthritis, Rheumatoid Arthritis etc) Range of motion limitation due to muscle stiffness, Muscular spasm and pain, Sports injuries, Stiff joint.

12. Myofascial Cupping: This types of cupping is basically used to release the myofascia. It is a two cup procedure and generally used for long & bulky muscles. Placing two cups at the same muscle belly and stretching them in opposite direction is the technique of application.

Indications - Calf muscle spasm, Low back pain (extensor group of muscle), Quadriceps weakness and spasm, Lumbar radiculopathy

13. Sports Cupping: It is popular for on field application. It also releases the myofascia and reduce the pain and spasm and promote healing. It can be divided in two types by its mode of application.

a. Dynamic sports cup – Here the target muscle or area should be selected first. Two cup placed in muscle belly and stretching should be done along with the cup. Then it is left for 5 to 10 minutes as per the requirement. Stretch effect should remain same throughout the treatment time. If the stretch effect is reduced then cup can be withdrawn.



b. Static sports cup – Here the stretching is done prior to cup. After stretching apply the cup at two poles of muscle (near to the origin & insertion point).



CONCLUSION :

Cupping has become a popular and effective mode of treatment. In most of the countries Cupping is used by the Physiotherapists in various field like sports, neuro, geriatrics etc. Other than Michael Phelps' spectacular performance during the Rio Olympics, what caught the viewers' attention was the large,

round bruises on his chiseled body, and by now, the whole world is aware of the reason: they are the after marks of cupping - an ancient Asian healing ritual. Not just Phelps, a number of celebs including Gwyneth Paltrow, Jennifer Aniston, Victoria Beckham, Justin Bieber are also swearing by the therapy. Cupping can reduce any kind of pain, so it is said by the Cupping practitioners that **Cupping can cure everything but cannot linger death.**

This article is divided into 2 parts. This is Part I of the article. In the next issue, we shall cover part II, which would include: Cupping equipments, Conditions where cupping is used commonly, Where not to apply, Absolute contraindication, Yellow flags, Age, frequency & no of cups, Cupping marks, Most preferred time to undergo Cupping, Do's & don't after being cupped.



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For more visit www.fitofine.org

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Art in Physiotherapy

The need & importance

Art is an integral part of humanity. 90% of information transmitted to the brain is visual, and visuals are processed 60000x faster in the brain than text. Everyone's brain has a visual tool kit and this depends upon what we see in normal environment on a daily basis. According to our visual kit, our brain gets the meaning of the visuals. So, visuals make it easy for our brain to understand.



Bhavan Bhavsar
The writer is Neuro rehab expert, creative designer, Neuro Marketer

At one workshop, a participant asked me, how visuals can give meaning? I told "when you think about innovation, which object do you remember?" I am sure most of us remember the light bulb which relates to innovations or innovative thinking.

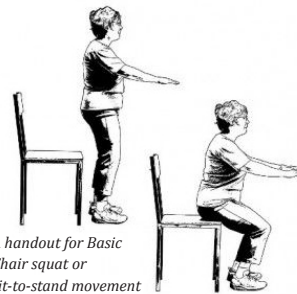
Let us first understand how our brain process information. When we see any object or art or activity the first response comes from the primary visual cortex which gives outline of the object or activity. In progression to that it goes to secondary visual cortex which fills color and gives insight to the object. Then after it

reaches to inferior temporal lobe where it understands the object in space & depth. At last it is the parietal lobe which gives the meaning. Our brains have to do a lot of work with all that raw data that comes in - stitching it all together, choosing what to concentrate on and what to ignore. It's the brain that constructs our visual world.

Now the question is how we make such art, object or activity which can be easily remembered and all this depends upon how we regulate the above-mentioned process more attractively.

How many of us have experienced that our clients (saying patients is not ethical now in some countries) ask for handouts for home exercise or

an exercise regime to remember, and what do we give to them?



A handout for Basic Chair squat or sit-to-stand movement

We know Google guru always stands up for anything and we give copy/paste print outs to them which are not at all appealing and many of our clients even don't bother to see them. The role of creativity and art comes in where we want to pass our information more purposefully and with an impact

which can be remembered for long. A clearly defined and explained home exercise program is important to recovery. The correctly prescribed and performed exercises can greatly reduce pain and help restore function. Likewise, an incorrectly prescribed or performed exercise has the potential to aggravate a condition. This is exactly where a more effective visual communication would be an advantage, both for the therapist and the patient as it would aid treatment adherence and patient compliance.

A research done by the University of Waterloo, Canada states that visuals, pictures or signs are more

effectively remembered for a long time in comparison to written information. 40% of people will respond better to visual information than plain text. 65% of all the population are visual learners in the world. Only 10% of spoken words are remembered after 72 hours. All word or letters are transmitted as pictures to our brain.

Art or creative visuals can be used in physiotherapy to propagate the information for purpose of education to students/clients /self-learning. It can be used in our educational system to make vital understanding easy, for clients to remember prescribed exercises & co-relate therapist's sayings, while self-learning can be executed by e-learning or other medium.

There is one more emerging field called as "neuromarketing" which can also help our understanding further. **Neuromarketing is a field that applies the principles of neuroscience to marketing research, studying consumers' sensorimotor, cognitive, and affective response to marketing stimuli.**

In neuro marketing one can understand the consumer behavior by many methods (Eye tracking, Heat maps, EEG, EMT.etc) and make the end product more profound in a sense which can make more appeal to the viewers. By knowing likes/dislikes of our clients we can modify our design, working pattern, working environment etc.

For Example:

1. Why do we make pediatric wards in a way which appeal to the kids?
2. Why in many of the consumer stores we find lemon scent? Lemon scent is proved to impact positively in decision making of buyers.
3. Why we choose different colors for different gender?
4. Why Kinesio tapes, rock tapes or other tapes come with flashy colors? Dynamic tapes are now coming up with self tattoo design to attract more clients and give less negative impact on our clients about tapping because it matches the skin color and looks like tattoo on skin.
5. Why do we find orthosis in flashy colors ?

There are many such examples to make us understand why we need to balance likes/dislikes of clients.

As mentioned in the process of visual transmission, we understated that outline & color has got its importance and we need to apply that while making the visuals. Circle is the first shape of visuals transmitted through our brain easily. Red, blue and yellow are the shades which give positive impact and person remembers more objects with these colors.

What are different art forms?

Art form can be anything. It can be pictures, charts, infographics, visuals, videos, paintings, drama etc. Choosing the most appropriate art form is again a skill and can be developed by learning few principles of neuro marketing.

To make it simple let us see a few examples:

Charts: Information can be easily produced with pie chart for better understanding than written contents.

Visuals: Better diagram of exercise can be easily remembered and executed than written messages.

Infographic: Information narrated in graphical way can sharply get into the brain

How physiotherapists can learn or execute such art form?

Art is not something that is always taught in schools and colleges. One needs to be passionate and if one draws attention and sees the environment with a different eye than he/she can be creative. One needs to think out of box to be more creative and artful. Most profound thing that researchers found to be creative is not to have expectations. If you don't expect the things the way it is than you have that urge to be more creative and which can produce many innovations.

Many online resources are available for making your creatives. One can also create the visual program with few softwares which can be done with the help of a designer or neuro marketing professional.

ONLY 10% OF THE SPOKEN WORDS ARE REMEMBERED AFTER 2 HOURS.

Where art can be useful in physiotherapy?

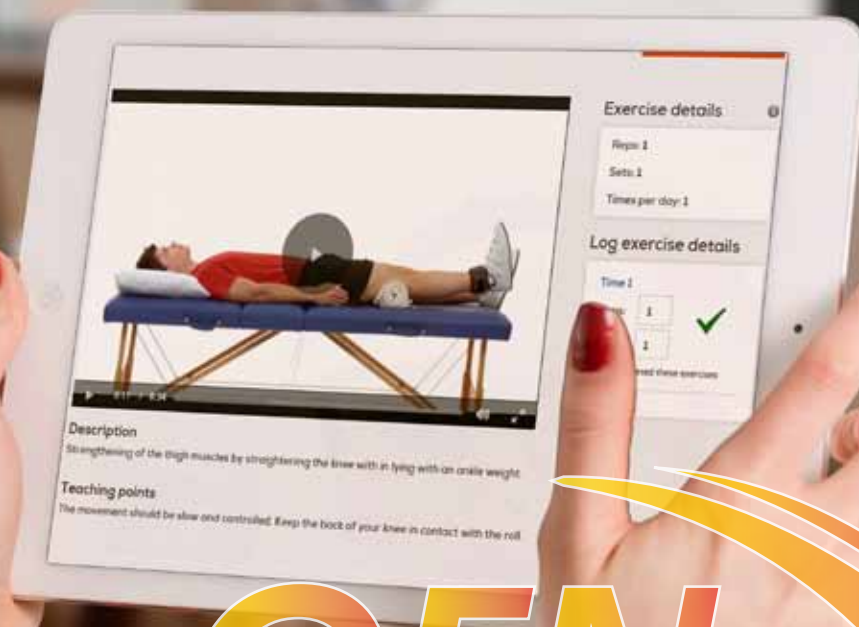
1. Education - academic level / self-learning
2. Feed-forward for clients
3. Branding & marketing
4. Improve self-assurance
5. Establishment of treatment protocols
6. Innovation in therapies
7. Design of equipment
8. Shape up positive environment

Marketers & designers are there to build up art for therapists but we need to be more creative to pass on our message clear and loud.

To sum up, physiotherapists who would embrace visual content are likely to see huge returns in terms of, well, more inquiries, leads, and clients. Oh, also revenue. So take a re-look at your marketing program and patient communication and see how visually competent it is.



TAKE ACTION TODAY. GET VISUAL. GET NOTICED. GOOD LUCK.



GEN-X

The healthoid way

Whether we agree or not, we are already in the clutches of technology and the youth these days is suffering from the APP FEVER. The cell phones with faster internet, 4G and mobile application market in different stores (GOOGLE PLAY STORE, APP Store) is gripping us; whether you are a student, a professional, a technical person, a teacher, a doctor; name a profession and you have an app for your taste and skill.

Definitely there is no reason as to speak; to avoid smart phones and the apps. But as health care providers - as physiotherapists, how professionally are we being benefitted? Is there a need to develop physiotherapy and health related apps? YES of course!

There is no one who can deny of not having any ache in the spine, knee, foot; commonly! Just one random search on Google Play store would reveal that there are already a plenty of apps available for the use of physiotherapists.

However, this article would discuss, why should there be more new apps developed for physiotherapy and what are the areas that can be covered in those apps.

Physiotherapy is a vast subject and there are a lot of areas which a physiotherapist needs to refer during the course of assessment and treatment. It might not be possible to carry huge books to clinical areas where students are posted. In instances where they have a doubt and they need to quickly refer something, a physiotherapy mobile application would help.

The health care mobile applications would usually contain information like:

- Normal and pathological reference ranges (biochemical laboratory test references)

- Scales commonly used for grading medical conditions
- Anatomical landmarks, surface anatomy for easy reference
- Flowcharts and figures for treatment purposes.
- A clinical know how for differential diagnosis
- Clinical bedside pearls which make the diagnosis and treatment much more precise
- Database of physiotherapist, clinics, and hospitals - so that it becomes easier for patients to search physiotherapists.

Through these apps students can refresh their knowledge anytime, for optimal use of their time. Patients get a briefing about the disease condition they suffer, so as to be well informed before consultation. If exercise videos are made available in the app, these would help

patients do the exercise correctly even at home without supervision and enhance motivation and compliance.

Mobile applications can actually help both the end users & the service providers by providing a common platform & knowledge. Here we mention different strategies as to how APP MARKET can be a boon for physiotherapists. These guidelines would help the technical people to design the app & the physiotherapist to guide accordingly in the process of instructing the app makers.

1) EXISTING NON PROFESSIONAL APPS:

There are a lot of mobile applications which are already installed in our cell phones, those common ones; the new applications can use the existing platforms for introducing themselves to the potential customers in the following manner:

- By creating an advertisement of the clinical setup, instrument, any course for physiotherapists; in any health related app or in other top grossing apps.
- Flashing and flickering messages that are eye catching - like conditions we treat, consultation fees, package benefits scrolling below the common applications.
- Easy to click link available in the same commonly used apps - which would redirect the patients to a physiotherapist's contact information.

Suggested pages section containing physiotherapy related information

2) CREATING NEW PHYSIOTHERAPY RELATED APPS:

This is for the new development of the application, which can be customised and framed as per the need of the therapist. It is further divided into the following categories.

a) FOR PROFESSIONALS & STUDENTS:

The designing of the mobile applications should include the following points:

- Newer inventions, interventions, concepts
- evidence based studies for up gradation of knowledge
- newer treatment protocols for professionals to use for their patients, so that the therapists are up to date professionally
- Basics for students to revise in the last minute. These application information would include basic sciences, conversion tables, laws, theorems
- Normative reference values and clinical notes (like bedside pearls)
- provision for storing patient information by the professional, as a part of medical records keeping
- common suggested investigations and their findings for any, they can also provide nearby diagnostic laboratory details
- differential diagnosis of common conditions
- blogs exclusively for physiotherapists to explain their experiences which they face in day to day life in the clinical set up, do's & don'ts





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- online chat zone - to discuss patient issues so that peer advice and reference is available handy
- legal health care advisory information as medical professional do lack legal knowledge
- app to buy and sell physiotherapy related stuff and equipment, so that it is easy to set up a clinic for a new comer
- hospitals, clinics, vacancies and home care database - to join, apply for job, to deliver treatment is all made easy and at finger tips

b) FOR PATIENTS:

When we think of making an application exclusively for the patient or a section to be designed for the use of the patient it should be kept in mind to keep things as easy as possible.

- Apps showcasing scope of physiotherapy
- content should be easy and simple to follow even by a layman
- health and disease awareness
- role of physiotherapy in disease prevention
- lifestyle changes so that life is healthy
- contact numbers, timings, route to reach a physiotherapist clinic/ hospital - the ease of treatment process
- easy to fix appointment through app
- online help desk by physios to answer questions asked by patients
- online payment mode for services advised



3) COMMUNICATION APPS:

There are lot of social connect applications which are rampantly used for information transfer among peer groups. Such platforms should be used for professional interaction and information transfer as much as possible.

- Communication apps like whatsapp, viber, hike to name a few; can be used exhaustively for knowledge transfer and sharing.
- these apps enable the user to form a group of professionals / students of same college or different college to share information
- physiotherapists of a particular locality or state can form a group and help each other during patient referral and case discussion
- same way groups/network can be formed by different physiotherapy clinics, hospitals, colleges, instrument suppliers
- these can be means of sharing e books between peer groups

The good news is that a lot of the above is already being done by many proactive professionals. The only thing to take care is not to mix other things with professional exchange. For example, a whatsapp group sharing e-books must only focus on various books. Members must refrain themselves from posting any unwanted information.

4) VIDEOS AND PICTURE GALLERY:

These exclusively designed applications contain pictures & videos of professional content. Such apps can be developed where information regarding disease is available pictorially. For example,

- X-rays of common conditions. Typical radiographic features being highlighted.
- videos demonstrating exercises for common conditions
- videos pertaining to good ergonomics, good posture and its benefits
- life style modification
- disease prevention strategies

CRITERIA TO DEVELOP PHYSIOTHERAPY APP:

1. A catchy name
2. An attractive logo
3. Consume less phone internal memory
4. Listed in the free application category to reach masses (paid applications may be available for physiotherapists)
5. Easy to use
6. Contain use of simple terminologies
7. Diagrammatic representation for advises and exercises, with easy to follow flow charts

Coming days would see a lot of innovative apps being made to enhance effectiveness for physiotherapy in the clinic, in education or just for professional development

8. Videos or links for videos where appropriate
9. Direct to website links for wholesome information
10. Provide help desk/support/contact us section for feedback & resolution of issues if any
11. Chat zone with prompt reply and response from the technical support team
12. Rating and reviews section

PHYSIOTIMES app has done justice to the physiotherapy fraternity by providing a platform to learn, express from the knowledge pool of physiotherapy. It ensures to cover health care holistically.

We are sure the coming days would see a lot of innovative apps being made to enhance effectiveness for physiotherapy in the clinic, in education or just for professional development thereby helping the physiotherapy fraternity and patient population derive its benefits.



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Home Healthcare: Best Practices

Home health care is a system of care provided by skilled practitioners to patients in their homes. The goals of home health care services are to help individuals to improve function and live with greater independence; to promote the client's optimal level of well-being; and to assist the patient to remain at home, avoiding hospitalization or admission to long-term care institutions. When it comes to physiotherapy, home health care is an integral part of the practice. More so in the modern era, where people have started expecting everything over a single click of a button, home health care is fast becoming a more convenient and usually less expensive alternative, especially for the elderly population.

After listening to the home health care experiences of my colleagues at work and other physiotherapists, I thought of writing about this important topic from my point of view. I have been actively involved in home health care for about three years now along with my job at the hospital and thus thought of taking up this topic on a larger scale for all of us in this field.

While I was in the United States, I was constantly reminded about the importance of documentation, insurance policies and also heard numerous cases of clients suing the therapist or the Insurance Company's queries for Physiotherapists to justify the number of sessions needed by the patient to restore them to their prior

functional level. However in India, most of us are not currently facing such issues due to the standard of practice being different from other countries but very soon I am sure that we will also have these procedures soon enough with so much advancement in our field in the last few years!

Let me narrate a small incidence that prompted me to take this up more sincerely. I will highlight the important things. I was treating an elderly lady aged around 80 years for her right knee pain, which developed after having twisted her knee while trying to get off the car. She was unable to travel due to the pain thus wanted to be seen at home. They had

already tried some home remedies but to no avail. She resided with two maids in the house and her daughters would visit/stay whenever possible. We started rehabilitation keeping all the factors such as age, medical history (HTN, IHD and severe OA of both knees requiring TKR which she didn't wish to undergo), x-ray and orthopedic clearance in mind and progressed very slowly with her.

I explained all precautions and necessary steps that needed to be taken to the daughter and the maids, gave regular updates to the daughter post every session and handed an exercise sheet with instructions in the language understood by her daughter and maid

separately. Having learnt the importance of documentation, I used to keep a record of general patient details, anything clinically relevant or the changes made in exercise protocol in a notebook as and when possible, more for my reference and self reflection to modify treatment/evaluation.

The sessions were irregular after sometime as she was having other health concerns and I insisted on medical clearance from her Cardiologist before continuing her physiotherapy treatment. Her daughter contacted me after sometime stating that her mother was better and the doctor said we could continue rehabilitation. I resumed the session and noted that she was complaining of increased pain in her right knee on weight bearing which wasn't present earlier and I requested her daughter to see an Orthopedic at the earliest, however they said they had shown him and he had advised TKR only so we should continue.

However I refused to go ahead with the treatment as I noted increased swelling, bruising and pain in her knee. I also noted that the maids and daughter had different versions of details which were told to me when I inquired about my patient's activities in details. After a few days the daughter said that she took her mother to a different Orthopedic who advised her bed rest and also made a comment

regarding the Physiotherapist not having enough knowledge and thus she had landed with a tibial stress fracture (She used colloquial words on behalf of the Orthopedic which I do not deem appropriate to quote here as I am aware of only one side of the conversation). The daughter didn't accuse me directly of anything but I was deeply hurt by her statements and sudden change of words.

Despite repeated requests and concerns to take her mother to an Orthopedic they refused to do it when it was needed and found it so easy to put us at fault for what could have gone wrong at their end. Luckily having my notes, images of the patients knee range (after taking her permission) I was confident that I had taken all precautions and still faced with this unpleasant situation. I start wondering what if I wasn't keeping a note of things, what if I had not stopped further treatment at the right time?

This led me to thinking that so much could have gone wrong in terms of not knowing the truth from the daughter or the house help regarding patients activities at home which could have led to the increase in pain, any carelessness on the part of the house help as they have their own advice to give to patients, what message was conveyed to the Orthopedic, were the exercises being done or not, were they not followed correctly and so many small things which could have gone wrong. Luckily she didn't land up with anything severe or it could have led to a negative mark on ones career without being at fault.



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I discussed this with all my colleagues and HOD at work and also started thinking that even when we try to go with the right clinical decision every time we may not have evidence to prove it.

I would like to take this opportunity to provide with some guidelines and safety measures for all those practicing home health care.

A few important things which I think we need to take care are:

1. SAFETY

- Have brief knowledge of the family members of the patient you will be visiting.
- Safety is important and an issue that is not given lot of thought.
- For female therapists make sure there is some female present in the house while treating male patients and visa versa.

- Keep someone informed about the area / homes one plans to visit.

2. CHARGES

- Be clear about the charges before you visit (these are variable everywhere but till then its ethical to keep charges uniform for all from a particular work-place).
- Discuss how the payment will be given (Cheque/ Cash/other means).
- Inquire if they require a receipt for the sessions in the beginning itself.

- Avoid using signatures and try using a stamp (there could be a misuse of your signature in your absence) or Letterhead.

3. DOCUMENTATION

- Document details especially clinical findings, reports, medical history and any other relevant information needed on day 1 of the visit.
- Keep a copy of the reports.
- Make a note of exercises added/changed and a note of important progress notes with dates.
- It is also important to notify the orthopedic/doctor concerned with the updates in patients rehabilitation. It could be in the form of a message/call or a simple note when the patient has an appointment scheduled with the doctor concerned. That is an appropriate way of gaining the patients faith and confidence as well.

FOR THE THERAPIST

Take care of your own body posture while treating patients.

- Ask for help where possible as a home set up is different from a hospital set up and thus make use of equipment to enable easy functional transfers.
- Sanitize.
- Wear comfortable and appropriate clothing including footwear.

FEW POINTERS IN GENERAL:

- Make sure you keep a record of the days that you make a visit and notify patients to do the same.
- Request the patient / family members not to make

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payment in front of the other staff at home and respect the privacy of your payment.

Keep a tab on medical condition of the patient & remember to STOP therapy if there is slightest suspicion of any abnormality.

Give clear instructions to the family members with regards to exercise and how they need to be done.

- Train the staff with regards to hygiene, transfers , care for the patient.
- Carry a small physiotherapy kit. The following things which comes to my mind

(tape, goniometer, pulse oximeter, stethoscope, theraband, pocket TNS/US/IFT, measuring tape, sanitizer, tissues, diary/notepad and pen).

If you are unsure about anything regarding the case, please discuss and ask for guidance than proceed with something that may prove detrimental to the patient. I would be more than happy even if one small thing is of use to any one of us! I am sure there may be things I may have missed out but I would be happy if this topic leads to a discussion amongst us!



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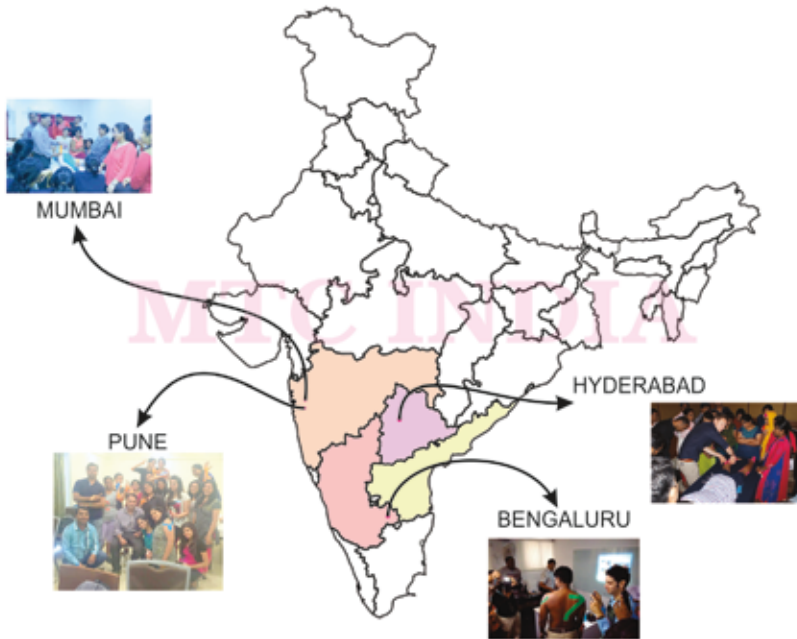
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CURRENT AFFAIRS

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Neonatal physios should monitor preterm babies until age of two, NICE says.



Specially trained physiotherapists should be involved in the care plans of premature babies from as soon after they are born as possible. This is according to new clinical guidelines from the National Institute for Health and Care Excellence (NICE), which recommend that the expertise of neonatal physiotherapists is used more commonly when it comes to treating preterm babies.

NICE has recommended that physios should be involved in preterm infants' care plans until they reach the age of two.

Neonatal physiotherapists could also help with cognitive and sensory developmental challenges, advising parents on exercises and activities they can do with their child to give them the best possible chance in their early years.

NICE has recommended that physios should be involved in preterm infants' care plans until they reach the age of two, carrying out assessments, advising on treatment and attending face-to-face follow-up appointments to monitor progress.

(Published: Aug 21, 2017 Source: <https://goo.gl/WfWYi7>)

Could physiotherapy exercises help reduce incontinence?

A study is to take place to test whether a type of physiotherapy could reduce the incidence of urinary incontinence in Britain's care homes.

Researchers from Glasgow Caledonian University want to investigate the efficacy of delivering a mild electrical stimulation to the leg that should also affect the bladder.

Transcutaneous tibial nerve stimulation (TPTNS) involves placing two surface electrodes on the patient's ankle and using a small electrical stimulator to send a pulse to the nerve near the ankle. This is because nerves that control the bladder are also connected to the tibial nerve at the back of the lower leg. By stimulating this

nerve through the skin, it is hoped the bladder should also be stimulated too. The treatment is akin to using a TENS machine for pain such as that associated with labour.

Published: July 19, 2017 Source: <https://goo.gl/7hbTN4>

Scientists testing new walking technique for rheumatoid arthritis patients

Funding has been approved for a new study that aims to see whether gait rehabilitation could work as a therapy for patients with rheumatoid arthritis (RA).

The walking technique has already proven beneficial for people with mobility issues resulting from neurological conditions such as stroke, multiple sclerosis and Parkinson's disease.

Now, the National Institute for Health Research (NIHR) has provided Glasgow Caledonian University with £1.8 million to run five-year trials that will test its efficacy on people who have painful joints and difficulty walking as a result of RA.

Published: July 5, 2017 Source: <https://goo.gl/R3NRdY>

Can Accelerometers, Fitness Trackers Be Used For Research?



Fitness trackers are nowadays commonly used to track daily physical activity levels. But they may not be a good choice to use them as a source of objective data for research.

In a "state of the science" review, Roy J. Shephard, identifies some key issues that need to be worked out in using data from activity monitors to confirm and clarify recommendations for physical activity to promote good health. 'Accelerometers perform fairly well at moderate walking speeds, but are less accurate under other conditions - for example, slow walking, vigorous running, and atypical gait patterns.'

Continued technical advances might help to overcome some of the limitations of current activity monitors. In the near future, more complex devices may be capable of linking simple body acceleration data to other factors such as posture and GPS location.



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Self-guided physio-therapy could benefit chronic fatigue patients



A self-help approach to a graded exercise program, supervised by a specialist physiotherapist, is safe and may reduce fatigue for some people with chronic fatigue syndrome (CFS), according to a new trial of 200 people published in The Lancet. The intervention, undertaken over 12 weeks, had a smaller effect on reducing physical disability.

The intervention might be useful as an initial treatment for patients to help manage the symptoms of CFS.

The self-help intervention (guided graded exercise self-help, or GES) involves slowly and safely building up physical activity levels (eg. a few minutes walking) after establishing a daily routine, with the support of a specialist physiotherapist over the phone or Skype™.

The self-help approach means that patients do not need to travel to a clinic, and the authors say the intervention might be useful as an initial treatment for patients to help manage the symptoms of CFS.

(Published: June 24, 2017 Source: <http://www.thelancet.com/>)

Physios should recommend yoga for back pain



Yoga is just as effective as other forms of physiotherapy in easing lower back pain, meaning physiotherapists may want to recommend it to their patients.

New research carried out by scientists based at Boston Medical Center in the US saw 320 patients suffering from pain in their lower back assigned to either a 12-week course of yoga classes or 15 sessions with a physiotherapist

over the same time period.

It was found that regularly taking part in yoga was as effective at reducing pain levels, improving movement and helping patients to come off or lower their dosage of pain medication as standard physiotherapy.

With these findings in mind, physiotherapists could begin suggesting yoga to their patients as an alternative to continuing with the exercises they have learnt during their regular physiotherapy sessions. The two forms of therapy could even be combined, as both achieve the same pain-reducing outcomes.

(Published: June 21, 2017 Source: <https://goo.gl/MHck72>)



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Best of web

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This site features daily blog updates, weekly podcasts, research reviews, videos, and more! Winner of Therapydia's coveted Best Overall Blog for 2014,* *which should be enough to make you check out the link.

<https://www.webpt.com/blog>

Stay on top of the latest rehab therapy tips, trends, and best practices. WebPT provides great content. If you are struggling to figure out what PQRS is, or what Medicare is going to do next, this is a great place to start.

<https://cinemasays.wordpress.com/>

A selection of a Physio's curiosities, interests, and explorations. Content will range from Physical Therapy to other interests and more.

EVENT CALENDAR

11th Gujstate Conphysc 2017

13-14 October, 2017 Organised by J G College of Physiotherapy, Ahmedabad
<http://www.conphysc2017jg.com>

Stride 2017, International Physiotherapy Conference

26-27 October 2017, Organised by Saveetha College of Physiotherapy, Chennai www.scpt.saveetha.com/stride17

MTFI MANCON 2017: Manual Therapy Conference

29 October 2017, Jodhpur <http://mtfi.net/>

PGCON 2017, JSS College of Physiotherapy, Mysore

3-4 December 2017, www.jssphysiotherapy.edu.in

SAICON 2017 - International conference on Sports Medicine & Sports Sciences

7-9 December, 2017, New Delhi
<http://www.sportsauthorityofindia.nic.in>

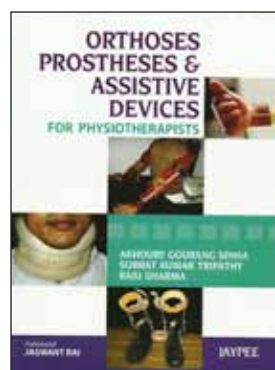
6th International Conference of Physical therapy

9-10 December' 2017, AIIMS, New Delhi www.incptaiims.org/

National Conference on Physical Therapy (NCPT)

16-17 December 2017, Mumbai <http://ncpt2017.com/>

Book Review



ORTHOSES, PROSTHESES & ASSISTIVE DEVICES FOR PHYSIOTHERAPISTS

by Sinha Akhoury Gourang, Sharma Raju, Tripathy Subrat Kumar

This book presents a comprehensive, yet concise description of orthoses, prostheses and various assistive devices such as wheelchairs, walking aids and therapeutic positioning devices (chairs,

standing frames and parawalkers). The subject matter is presented in three sections dealing with orthoses, prostheses and assistive devices. In this book detailed description of hand splints and foot orthoses (Jaipur foot), concise descriptions of spinal orthoses with specific clinic uses and biomechanics, and the types and components of upper and lower limb prostheses. In order to facilitate the understanding, the book contains a good number of figures and photographs of most of the devices described. The book intends to fulfill these requirements and attempts to provide all the relevant information in one place.

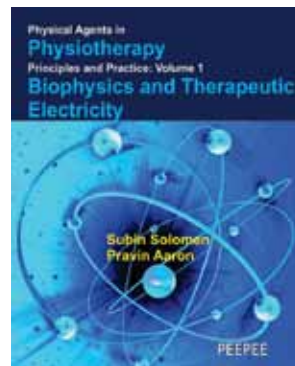
32 Word Maze On "Myofacial Trigger Points"

U	S	E	R	U	M	T	R	P	S	O
L	F	L	T	I	N	N	I	T	U	S
N	A	U	F	R	I	C	T	I	O	N
A	I	D	N	A	B	T	U	A	T	L
R	X	O	H	S	A	L	P	I	H	W
N	O	N	I	N	V	A	S	I	V	E
O	P	A	R	A	S	P	I	N	A	L
I	Y	T	I	L	I	B	O	M	C	A
T	H	O	R	A	C	I	C	K	E	R
A	N	T	A	G	O	N	I	S	T	E
N	R	E	G	G	I	R	T	A	Y	H
I	Y	R	O	S	N	E	S	I	L	P
L	R	E	T	E	S	S	A	M	C	I
E	H	A	I	G	L	Y	M	E	H	R
Y	E	H	C	A	D	A	E	H	O	E
M	S	I	C	I	V	R	E	C	L	P
E	R	E	M	O	C	R	A	S	I	J
D	R	Y	N	E	E	D	L	I	N	G
T	Y	C	I	D	O	S	I	P	E	Y

Search as many words as you can related to **Myofacial Trigger Points** from the given word maze. They can be in any order or any direction. (Horizontal, vertical, from left to right, right to left, top to bottom, bottom to top & overlap).

You can e-mail the answers (only key) of this word maze along with your name, city, designation & a profile picture on our email id: **contact@physiotimes.com** before **14th Oct'2017** & the participant(s) with maximum correct responses will be declared as the winner(s). The winner's details will be published in our forthcoming issue with photograph & he/she will be entitled to win the Special Prize.

Special Prize for the Winner



Biophysics and Therapeutic Electricity

- Physical Agents in Physiotherapy (Principles and Practice: Volume 1)

by Subin Solomen and Pravin Aaron

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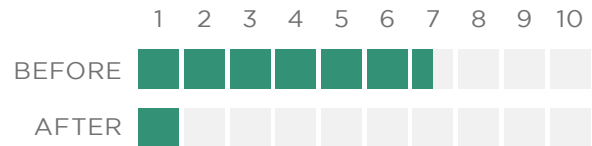


MYOSTIMULATION



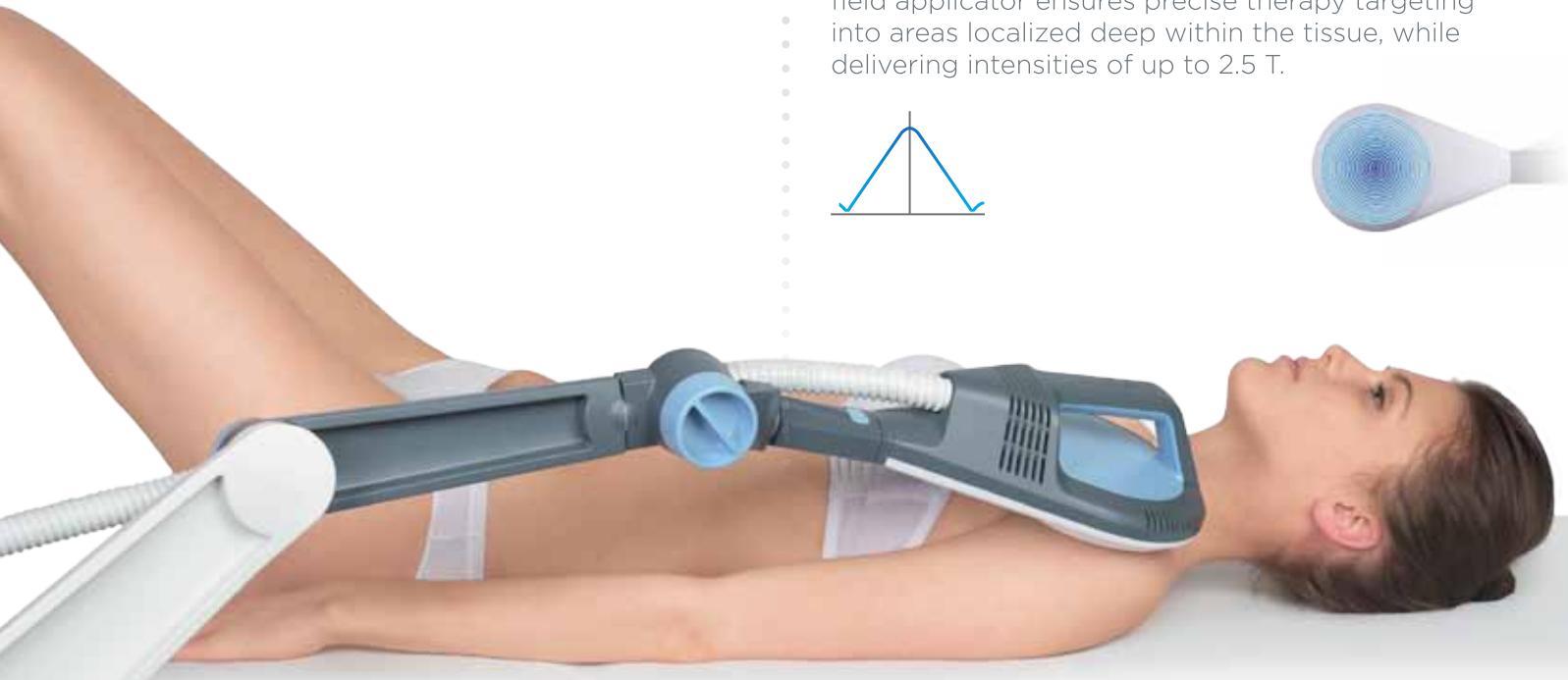
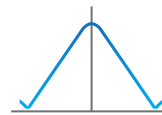
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