



Roma, 27 marzo 2019, Ospedale Salvator Mundi, Prima giornata studio sul Recupero della lana e le sue valorizzazioni promosso da Gomitolrosa in collaborazione con Agenzia Lane d'Italia e Legambiente.

Riportiamo integralmente l'intervento di BETSAN CORKHILL, fisioterapista con molti anni di esperienza, ha combinato il coaching con le conoscenze mediche per aiutare le persone a sviluppare un piano di benessere personalizzato. Ci parla dell'uso della maglia per migliorare la salute e il benessere.

BETSAN CORKHILL - Hello and thank you for inviting me, to your lovely city. I am going to talk to you today about using knitting to improve health and wellbeing, and how we can use this to close the loop in a project, by improving health and wellbeing of individuals and of communities so making a "WIN WIN situation".

I've been researching the meditative, creative, and social benefit of knitting since 2005 and I set up "stitchlinks" in 2005 because I recognized the people who would need a safe and trustworthy source of information to go to and the newsletter goes out to more than 92 countries around the world. I've been a passionate believer in a whole-person approach to wellbeing & health since 1970 when I moved from London teaching hospital where I was working as a physiotherapist to "medical rehabilitation spa" in Switzerland where I worked as a physiotherapist and here they really understood the value of looking at Wellbeing, health, and heal health from the person perspective and it really open my eyes to other approaches so I stopped being a body mechanic and I being using all personal approach to my practise ever since.

So I now work as an lifestyle health coach in Bath, but I also do session on Skype with people with long term health issue, particularly long term pain.

I want to start by drawing your attention to the biological fact that we all have the power to change ourselves neurologically and biologically, even the way our brain is connected and the ways our neurons work.

So not matter what your starting point, everyone has the power to do that, everyone sitting in this room has the power to change. And I think this is a hopeful powerful message that we should be shouting from the rooftops and therapeutic knitting can be used as an effective tool to promote positive change.

It's a biological fact that change is happening all the time, and we are all changing neurologically, biologically every second of the day in response to our environment. And that's called plasticity! We can actually learn to use that to our advantage even the way you think changes you neurologically and biologically. The way you think can change your immunology.

When I first heard of this, I thought wow! The way I think can influence whether I catch a cold or not and I think that this is very exciting, it's very powerful and when you have this knowledge , you can learn to use it to your own advantage, and we can use therapeutic knitting as an effective tool to promote this.

So therapeutic knitting, is about using knitting to facilitate positive change, so this is an anatomically correct knitted brain.

Your brain is crucial to everything you do, but it's also shaped and structured by everything you do, your environment, people around you, people you meet right up until your last breath, so back on the days when we thought the brain was hard wired we now know that the brain is soft wired and changes in response to your environment and everything you do in life, right up until your last breath.

So we now know new brain cells are born and new neural pathways can be opened even in elderly people and that it's really exciting, but you have to take action to ensure that that happens , it's very much the case of using it or losing it.

And we know that this plastic changes are reversible and that's good news because it gives us the potential to change negative issues, but what it does mean is that we to ensure that every changes we make are on-going Lifestyle changes.

So our biology is changing all the time, other system are changing too, our stress, our immune system, change in response to our environment, our heart and our muscles change in response to the amount of exercises we gave them, even new skin changes if you walk for long enough without your shoes on, the skin on the soles of your feet with ticked up.

So our biology is changing and our body work as all, embedded in our environment and culture and change in response to that environment and culture.

So what is whole-person health?

The whole-person health is the Consideration of health within this bigger picture of your life, of your relationships, the people around you, your environment. So everything you do and everyone you meet will affect your wellbeing.

Even the things you Listen to on the radio or watch on the TV will affect your wellbeing

Doctor Margret Hannah has written a really good book called "Humanising health care" and in it she says health it's not just the absence of disease, becoming well is about restoring connection with life through healthy relationship with ourselves, other people and the wider world and this is particularly important for those people on the margins of society: the vulnerable people, homeless people, refugee people or migrated in to new areas because they will have endured trauma and high levels of stress along the way.

So We very much need to look beyond medical treatments and consider health within this much wider picture of the whole context of the whole life.

So I've been collecting stories from knitters from all the world since about 2005 and I've become really intrigued by why some people live happy and fulfilled lives despite a huge number of problems, and while others sink under seemingly minor issues and these core issues have come up time and time again, in hundreds of hundreds of stories that we received , hundreds of lives stories we received.

So the other things going on in your life make a big difference to how you manage life's normal challenges as well as how you manage or recover from ill health and the more Vulnerable is society, it will be Prone to this and I'm making a distinction between rewarding purposeful occupation and dutiful purposeful occupation here. I would considered housework a dutiful purposeful for occupation, because I don't particularly enjoy it, and what we found is that most people who are busy, stressed or not well seems prioritize dutiful activities over those beneficial for their wellbeing and we need to turn this around. And this core issue feed on each other they produce further issues of increased stress, muscle tension which lead to pain, worry, sleep problem, original [...] and migraine.

And in my experience if this core issues aren't dealt with, it's very easy to fall back, so we need to deal with these issues for longer -term success and therapeutic knitting alone and in a group can help you deal with these.

So how exactly does wool and knitting help?

I been often asked if there is a difference between knitting and therapeutic knitting, and the idea of TK has evolved over the years and I would say that TK Is a combination of knitting and knowledge, and that's knowledge about to enhance the benefits of knitting but also knowledge about how you can use it If you have a long term medical condition, how can you use it for that condition. And it's a knowledge about a whole-person health as well. So it can work for the individuals but it can also work for their careers, friends and family so it's something to everybody can do together and it can be taken a step further to manage a range of medical conditions

So we can use TK to manage life's inevitable changes or we can take a step further to manage symptom of medical condition and we can also use it to help integrate people into new communities, which is very important.

So let's take a look behind the "K" Word now. Knitting equals patterns of hand movement and hand position then you have an enriched environment and you can choose whether or not to knit in a social group with all the benefits that brings. That encourage the sharing of stories, building safe supportive networks, and again with could integrate people on the margins of society into their communities.

So benefits of knitting alone or in a group are different, the benefits are outlined in column 2 and 3, It can be found in other creative activities as well and I would encourage people to do a variety of creative activities, because variety is good for your brain health. And all the issues listed are beneficial for your wellbeing, including portability.

Knitting portability actually is the key to benefits as a health care tool, because it give to you a very powerful tool at your fingertips you can use anytime anywhere and that includes even in the middle of the night when often seem very dark to people or on public transport for examples, it enables people to socialize because it gives people a self-soothing tool to take out with them, so they are less fearful of going out. So it helps them to manage worries and emotions when they are out. It also enables us to use it in a

Busy clinical environment, makes it easy to use.

So the function of our hands and the information we get through them is very important. Our hands have driven the development of our brain throughout the evolution. Lucy was a pre-human who lived about 3.2 million years ago in Eastern Africa. And when they found her skeleton, she was found to have an un apelike hand, so she can do that kind of action BUT she still have an APE-LIKE BRAIN. So a hand developed before her brain. And we know a two handed pattern of movement

That crosses the midline of the body takes up a lot of the brain capacity in the moment.

They make your brain work quite hard and your brain has a fixed capacity for conscious attention on any given moment.

So when you're totally absorbed in an activity like this, your brain has less capacity to pay attention to other issues which might be detrimental to your wellbeing and that can helps us managing pain as well.

We know that rhythm repetitive movement enhances release of serotonin, which is an analgesic, Is calming and it raises mood. We carried out a survey of over 3.500 knitter from 31 countries around the world. And one of our significant findings was an 81% of responders felt happier after knitting, 54% felt happy or very happy; and excitingly fewer than 1% remained sad, and because we had so many people and so many respondents we were able to look at the numbers of people that told us they have clinical depression and they were about 600 people in that survey who had clinical depression and these finding are translated across two people with clinical depression and i think this is very exciting: fewer than 1% remained sad.

The rhythm of the movement is really important because it facilitate a meditative- like state and a sense of deep relaxation and instantaneously familiar, calming and relaxing. Actually we are looking at rhythm now as a way of calming the primitive brain down to people who are very stressed and If you combine this instantaneous calm with a portability, you have a very powerful tool that you can give people to carry around with them.

We know your brain likes rhythmic movements, your brain likes anything with rhythmic because it's predictable. Anything predictable makes the brain feel safe, so if you got someone who is in crisis, it enables them to feel safe and it's very beneficial to them.

If you think about it, when we get stressed, we tend to engage in rhythmic repetitive movement ultimately we roll back and forward, we might tap and many ancient culture make repetitive hand movements to ease stress and distress, you have your worry beads, Rosary, worry stones, the Chinese chime ball.

And this nurturing feel of safety in people and this is very important.

So Knitting could enable a much wider population to experience the benefits of meditation, including children, the elderly and those with dementia, learning disabilities. A Number of people will learn disabilities in my group.

Thanks to a really generous donation, doctor Etienne Roesch who I been talking to from 8 years is associate professor at the center of integrative neuroscience and neurodynamics at reading university it's actually one of the leading neuroimaging centers in the world will begin a study in September.

He will be exploring the effect of the mindful practise of knitting on EEG.

EEG is the signal you get from the brain, which represent a general level of activity, so patterns of brain waves, we'll being looking at. And Etienne he's an expert in mindfulness and he's already have done a lot of studies of mindfulness, so he's the ideal person to do this.

Our PROPOSAL IS that the mindful practise of knitting focuses its attention and awareness in a very similar way to mindfulness. So therefore it will show a similar features on EEG and they are now quite well established features, We see on EEG, when practising mindfulness so what we do is compare them with mindfulness. So potentially we can say they have similar health benefits and will be a start.

So the pilot will take 30 to 40 participants and compare EEGs before and after knitting and then those EEG will be compared to people when practising mindfulness .

The exciting thing is anecdote level Suggest people can knit when they can't practise mindfulness, so actually knitting can be more beneficial. What we found is that people who are highly distressed often can't practise mindfulness, but they can still knit so hopefully we will be able to show that's more beneficial.

The automatic nature of movement is really important as well because what we found is that if you give the brain a background automatic task to do, it seems to facilitate more free flowing conversation, so it helps people who find difficult to talk, to talk more openly. For example there's a place in the UK who's been using

knitting with Somali Women refugee who have been tortured and raped, and won't find easy to talk about it at all, so they put them in a knitting group, with the aim of just getting them to talk, and it took about 20 minutes to make them to talk. So it's very useful in that kind of situation and they also facilitate access to subconscious because automatic movement happens in the subconscious and its evidence breaks into rumination, it seem to break into the negative circle of thought.

Knitters tell me that it actually gives them a break from the constant chitter chatter that goes on in their minds. This is what a young woman told me: "When I knit I reach a place of peace that I cannot reach in silence – the silence is more often so loud with negative thoughts and memories"

This was a young girl with paranoid schizophrenia and knitting was the only things that shout off the voices in her head and is the only way she could achieve peace and we hear the similar kind of stories from people who are in a cute bouts of depression as well or are highly stress knitting seems to switch off those nagging little voices.

So the hand position is really interesting and important as well, so your hand position protects your personal space. So it means knitter feel safe in that bubble of calm so we can use it to enable

People to socialise more, to use public transport whereas they normally they might feel a bit fearful of this and they become more likely to be house band.

And this combination of rhythmic bodily movement, thought and feeling is really important and is somehow unifying .

An enriched environment is really important for your wellbeing and brain health and it becomes clear through this work that creativity is important for psychological flexibility, for your ability to self-manage and your ability to problem solve. If you think creatively you got more options left open to you.

the neuro orthopaedic institute based in Adelaide wrote an article in support of therapeutic knitting and send it out in 60000 nations around the world and it had a lovely paragraph about creativity in it. And they say: "Creativity has a biological basis and, as perhaps the ultimate whole-person output, it can powerfully unleash beneficial bio plastic change.

On the same Creativity, mental agility and exploration encourage a healthy brain environment.

And under those conditions rehabilitation, therapy, and medication are more effective and more likely to work... and that makes sense doesn't it? The healthier you can become in yourself the more you can work on improving your own brain health the more effective everything else will be, and actually you may not need to have the medication we have been very successful in helping people to cut down medication using therapeutic knitting.

It's actually much better to be actively creative rather than being a passive recipient in life, so it teaches people to take responsibility for their own health.

Introducing Regular novelty is also really important and we don't have a problem with that, when we introduce people to knitting. We know that regular novelty Facilitates the growth of new brain cells and new neural pathways and helps to grow healthy brain even in elderly people. And it actually keeps us interested in the world and keeps us interesting to other people as well. So regular novelty is good for us.

The importance of feeling successful at something is really shone out in this work. And your brain has a system called the reward system which fires off a boost of feel good, pain relieving, motivating chemicals when you are successful at a task that requires a little effort.

And you get 3 reward when you knit:

-you get the reward of The on-going process, the lovely calm feeling that you have

- you have the reward of The end product . And you can chose to give the end product as a Gift to friends, family or charity. So doing things and being successful at them keeps this important brain circuit healthy and many people that i work with and many people from vulnerable populations have absolutely nothing in their lives they feel successful at.

So this is a really important step for them, to find something that they can be successful at.

and actually feeling successful at something on a regular basis (however small) is really important for wellbeing because it gives you access to your own drugs, the drugs your own brain makes. And the drugs you make are considerably more powerful that anything your doctor can inject or prescribe and have no side effect. So activities enjoy and make you feel safe enable you to access your natural feel good, pain relieving, motivating chemicals.

So I'm gonna take a look now to the benefits of social engagement:

Community, Friendship, Support, Touch, Belonging, Easy Banter, Raucous Laughter, Fun / Play with Others, Experiment / Explore, Eye Contact.....or Not, Communication, Mutual Learning, Perspective, Giving / Sharing, Confidence, Identity

and I think this slide says it all:

= I LLNESS
WE LLESS

John Cacioppo is a neuroscientist, who has a really interesting work on the neuroscience of loneliness. And what is found is that longer term loneliness makes the brain more alert for threat and that can actually make people appear to be aggressive or rude when they don't mean to be, so he actually helping people to understand that their behaviour may have change because they feel lonely.

So he also shows that we need to deal with two aspects of loneliness:

We need to deal with the emotional aspect and the social aspect. It's not the quantity of contact you have, but the quality of contact. people need emotional nurturing.

When know from his work that the feeling of loneliness causes stress levels to rise, it causes inflammation to rise, it decreases the effectiveness of sleep, and actually makes feel more people pain and so it makes a lot of sense to deal with this as part of a whole person approach to wellbeing.

We also know from his work that the feeling of loneliness is highly detrimental to health and wellbeing, it's like smoking 15 cigarettes a day, so it's highly detrimental, so both knitting alone and in a group can help people manage loneliness.

We also know that "Laughter and easy banter with friends is the opposite to your stress 'fight-or-flight' response." And you certainly get a lot of laughter in a knitting group.

And you get a rich formal social engagement you meet people from all different backgrounds, all different all walks of life, all ages.

and this is really important for integrating people into new communities, and actually for enabling people to realise that refugees and people who have moved into their communities are human too – and they are humans who have faced real and huge challenges. and it helps to build compassion in communities.

So the more you can engage in this sort of social contact, the easier it will become to tune up the body's natural healing system. and that can benefit the individual knitting, but it can also benefit the communities.

We also know that you are also significantly less likely to develop dementia if you stay mentally active and socially engaged. And the combination of the two is really important, is not enough to sit doing your brain training at home alone, the social aspect of it is important as well.

So what we found is that knitting enables social engagement and it gives people a common interest, so a point of conversation that is outside themselves, outside their own problems.

The hand position protects their personal space so it makes them feel safe within a group.

it also gives a self-soothing tool to manage any emotions or anxiety they might feel at attending a group. because it's not actually that easy to go into a new group, to attend a group for the first time.

And the other thing we found is really important, is the eye contact or not, because what we found is that people who feel vulnerable, may not want to participate in a group so it's perfectly ok to sit and knit quietly in the group if you don't want to participate on a particular day and that makes people come back.

And it also put the knitter in control over how much they wish to participate, so they feel that control so they makes it easier to attend a group.

I want to say that loneliness and solitude are very different. Loneliness and being alone are very different. so knitting enables you to learn to 'just be' in your own company as well. And what we been doing is teaching people how to enjoy moments of solitude and using enjoyment of solitude as a way of managing their loneliness. And that's a really important part of wellbeing and it can help people counteract feelings of loneliness. So whereas loneliness raises threat level, enjoyment of solitude is beneficial to your wellbeing and it nurtures feelings of safety.

So there is a growing need for instant gratification in our modern world. Lasting success in all aspects of life requires on-going commitment, perseverance and patience and we are in danger of losing those skills to the detriment of our wellbeing. And that actually that's become a really big problem in healthcare because we go to a doctor expecting a quick fix for everything, but knitting teaches you that you have to work towards and wait for the best outcomes.

In our survey, knitters told us they learned life skills patience, perseverance, planning, a sense of commitment, that things are never perfect, that actually the best way of learning is through trial and error. And interestingly they told us that they learned that mistakes can be undone.

And actually you can reach your end goal despite a number of detours along the way and that the end goal is often is richer because of the mistakes that you have made. and I think that these are really valuable life skills that aware a risk of losing and they are vital for long term success in all areas of life particularly health. if you persevere things will start to happen, things will start to change.

So looking at Knitting as a healthcare tool now. So its practicalities are Portable, the Learning process involves no wasted materials, and we can take a kit to a person's bed, so we can start that rehabilitation from the person's bed. It's not messy to set up and the reward is attainable by all, it doesn't require any artistic talent. It also Cuts across class, culture, educational background. And people can top up the knowledge from DVDs, Books and YouTube.

So Alberto mentioned this briefly earlier: it's really important to switch off on a regular basis .

One of the main ways you can use knitting to improve your wellbeing is to use it to manage stress on daily basis. stress is a major cause of ill health in today society and knitting's portability enables us to manage stress any time anywhere, even on your commute work or during your lunch break, if you need to. And refugees will be under a lot of stress for many reasons, but so are the communities in which they are trying to integrate into. And we now know that stress contributes to a huge number of secondary issues such as sleep problems and pain. And your pain system and your stress system are very, very closely linked.

One our most significant finding of our study was that the more frequently people knit, so they needed to knit more of 3 times a week, which is not a hardship, the happier and calmer they felt. So we can use that as well.

so when you put measures in place to bring down your stress levels it enables your body's natural healing system to do its job properly and therapeutic knitting is a really effective tool for managing stress. So if you carry a portable kit around with you, you can do it anytime, so even 5 minutes here and there would be beneficial.

knitting was used for post-traumatic stress, and we had a lot of success for this and actually knitting was the treatment of choice for shell shock, a post-traumatic stress, after world war one. And this image of soldiers being treated with knitting at Walter reed memorial hospital in 1918.

and many refugees will have PTSD, mostly unrecognised and mostly un treated.

like I said, we have a lot of success treating PTSD with knitting.

so sometimes constant stress and life challenges can make life feel a bit like this, kind it, for all of us and actually what we need to do, is to focus on activities, that replenish you, that fill up that bucket.

I am going to talk about pain now.

A high number of refugees and those who are homeless will have pain. in general if you are homeless you will have pain and that comes down to your feelings of safety. When the brain thinks you are unsafe it will put all your protective mechanism on alert. And pain is one of your most important protective mechanism so we can explain how therapeutic knitting works from a biological perspective of pain and that's really important.

And I ran a therapeutic knitting group specifically for people with long-term pain and that's really successful but that's a whole talk in itself.

And tomorrow I'm actually giving a talk at a centre for psoriatic traumatology and how to you use Therapeutic Knitting to manage the condition of psoriatic arthritis so. So that's a whole talk in itself.

the calming properties of knitting can also help with worry, anxiety and panic. and actually we were able to cure anxiety and panic attacks using knitting. We asked people to took a portable kit around with them and when they feel levels of anxiety raising, they take out the knitting and they have the feeling of instantaneous calm. So they are still able to go out, they often find that just having the knowledge that they got this kit in their bag is enough for them. So we are managing to cure anxiety and panic with it. If they don't have the knitting to hand, we teach them to visualise their knitting, and that works really well as well. This is what one lady said:" Knitting helps me to slow down my thoughts so I can process them. It helps me shed the stress of the day. It gives me a rhythm to breathe and think and feel".

Sleep can be another problem area for most people at some point. If your brain doesn't feel safe it won't allow you to go into deep sleep because you can't run away or fight when you're in deep sleep. So we can use knitting just before bed or in the middle of the night if you wake up. SO if you find your thoughts are whirring around before going to bed, if you try knitting for 10 to 20 minutes before you go to sleep those thoughts will stop whirring and your mind will calm enough to allow you to go to sleep. You can even do it in bed, but choose an easy project that doesn't wake up your mind too much. And if you're sleeping with a partner, use wooden needles.

So I want to bare In mind that SLEEPING WELL IS ABOUT A LOT MORE THAN THE TIME WHEN YOU ARE IN BED: SLEEP IS STRONGLY INFLUENCED BY THE WAY YOU LIVE YOUR LIFE ,YOUR HABITS AND ROUTINES.

So we USE THERAPEUTIC KNITTING TO HELP YOU FOCUS ON RELAXATION THROUGHOUT THE DAY, and managing stress throughout the day.

So remember this slide: We can USE therapeutic KNITTING TO DELIBERATELY RAISE MOOD in those people who are stressed or depressed.

I remember this TRANSLATED ACROSS The people WITH CLINICAL DEPRESSION, so we can add in the benefit of their favourite colour for this for example or texture that feels good into this part of the therapy. Touching something good makes you feel good. So we should START THINKING ABOUT it TO DELIBERATELY RAISE MOOD. And these issues, they affect all of us for time to time, so we need to think about knitting, knitting groups and knitting alone in order to address this issues.

So we really need to move away FROM being BODY MECHANICS , the idea of FIXING A BODY PART, when people become unwell because managing and recovering from a health problem is about a lot more than focusing on symptoms. We know that if WE FOCUS ON SYMPTOMS THEY TEND TO GROW, so we need to START FOCUSING INSTEAD ON IMPROVING WELLBEING and KNITTING CAN HELP IN A NUMBER OF WAYS.

KNITTING CHANGES YOU NEUROLOGICALLY, BIOLOGICALLY, BEHAVIOURALLY and SOCIALLY.IT can ALSO CHANGES YOUR PERSONAL STORY and that's REALLY IMPORTANT FOR THE MORE VULNERABLE IN OUR SOCIETY WHO MAY FEEL THEY DON'T FIT IN OR may feel WORTHLESS, who may be living a long term health problem, it can really change that personal story into really something more positive.

UBUNTU is a word used by Nelson Mandela and this is what Barack Obama said:" we are all bound together in ways that are invisible to the eye: that there is a oneness to humanity: that we achieve ourselves by sharing ourselves with others and caring for those around us."

HEALTH AND WELLBEING GOES along WAY BEYOND THE HARD BIOMECHANICAL WORLD.

PEOPLE who struggle TO SURVIVE FOR WHATEVER REASON there might be:UNWELL, DON'T HAVE SAFE SHELTER, A RELIABLE INCOME, they DON'T HAVE THE ENERGY TO THINK ABOUT ANYTHING beyond survival.

The SURVIVAL has to be their main thing, Survival TAKE PRECEDENCE OVER ANYTHING ELSE.

And ISSUES SUCH AS CLIMATE CHANGE OR ANIMAL WELFARE they don't have the energy left to pay attention to those thing, IT'S NOT THAT THEY DON'T CARE.

So I would argue when we nurture individuals we nourish communities and we nourish the wider world

And we nourish the wilder world through that.

So I would argue this is how we close the loop in this project and make it a win win situation for everyone.

So this is the image of my book, obviously and I HAVEN'T BEEN ABLE TO COVER up everything on the talk today. It is translated in German and Spanish and hopefully soon to be translated into Italian.

So thank you very much for listening.