



Summary

LymphCare UK Community Interest Company (CIC) is an award winning Social Enterprise providing Community Lymphoedema, Lipoedema and chronic Oedema management to patients within the West Midlands.

The Service is Clinician Led and due to its legal Structure benefits from having a more flexible and innovative approach to Service Provision.

The Team at Lymphcare UK were inspired at BLS Conference after listening to both Dr Narahari and Professor T Ryan speaking of the benefits of Yoga in the management of Lymphoedema in Indian villages. There is also some further evidence to suggest that yoga can be beneficial for patients suffering with breast cancer related lymphoedema (Louden et al 2012).

After discussions with Public Health Dudley LymphCare received a grant and undertook a Yoga Project. An Audit was undertaken focused on a small group of Breast Cancer Related Lymphoedema (BCRL) patients. This enabled the team to measure and evaluate any outcomes of the yoga sessions for patients, using both pre and post LYMQOL and Circumferential arm measurements. Due to its success a further 12 month funding has been secured with yoga classes increasing to four times a week.

LymphCare have now also developed a Yoga Training Course for Health Care Professionals and Therapists.

A further pilot study is planned to gain more scientific evidence of the benefits of Yoga in the maintenance and management of Lymphoedema and Lipoedema and possibly other long term conditions.



LymphCare UK Community Interest Company (CIC) Yoga Project 2014-15

Inspiration from BLS Conference – Results in New Yoga Services for patients

Planning stage

Lymphcare UK commissioned Kay Hickman of Innaharmony to provide the yoga sessions. Kay is a qualified Wheel of Yoga Trainer and very experienced in working with diverse groups and clients with health related needs. A holistic and integrated approach was used and both Lymphoedema and Lipoedema were discussed to ensure that yoga classes and sessions were bespoke and that positions and stretches would promote lymph Drainage.

After initial discussions two local venues were located and patients were informed during clinic appointments and flyers were sent out attached to the Annual Survey. All flyers, posters and information were designed in house by LymphCare's Admin team. The use of Social Media and email helped with marketing the sessions.

The Yoga Sessions

All classes were free and were run over a course of 12 weeks with each session lasting 1.5 hours. It was envisaged that all patients in each cohort would be attending all 12 sessions. There was approximately 8-10 patients allocated to each session. All recruited patients were given information about what to wear and bring with them and had to complete a health survey questionnaire prior to being put into a group.

The 1st Cohort consisted of 2 classes, one in the north and one in the south of Dudley Borough. Through patient engagement and feedback the second cohort was increased to 4 times a week to incorporate the 'seated' and evening classes to ensure equity in accessing the sessions.

Pre Assessments Reviews - Audit group

To try and capture and measure outcomes from this initiative a pre and post cohort audit was carried out. Therefore a small random group of 10 patients with Breast Cancer Related secondary arm/breast Lymphoedema were invited to participate. Two patients were not included in the audit as they did not attend all the 12 classes.

The participants undertook a pre and post assessment which included a LYMQOL questionnaire. This is a validated, condition specific quality of Life (QOL) assessment tool for Lymphoedema of the Limbs. QOL measures can be used to assess the impact of Lymphoedema on the individual as well as be used to demonstrate outcomes of treatment or interventions (Keeley, 2008). The assessment tool is broken down into function, appearance, symptoms, emotions as well as overall QOL ratings.

Pre and post circumferential limb volumes were also recorded pre and post sessions. Only one Patient with Breast swelling was assessed pre yoga with the use of a Dolphin Moisture Meter. This is a new innovative device that can be used to measure Extra Cellular Fluid in the tissues.

There are different forms of Yoga and these classes were based on Therapeutic and traditional Hatha yoga, with stretching, balancing, deep breathing and relaxation forming part of the sessions.

The Audit group – after 12 weeks of attending the yoga sessions were re-assessed using the same LYMQOL and Circumferential measurement assessments to evaluate and measure the outcome of the Yoga intervention.

Patient	Affected Limb	Pre Yoga Total Limb Volume				Post Yoga Total Limb Volume				TLV Reduce	Weight Loss
		Right	Left	Excess mls	Excess %	Right	Left	Excess mls	Excess %		
1	Right	1855.05	1777.95	107ml	5.68%	1747.73	1657.76	89.98mls	5.15%	✓	✓
2	Left	1932.08	1822.10	-109ml	-5.69%	1876.32	1844.22	-32mls	-1.77%	X	✓
3	Right	2218.50	1856.50	362ml	16.32%	2217	1929	288mls	13%	✓	X
4	Left	2757.64	3133.99	376ml	12%	2757.64	3119.25	361.61mls	11%	✓	X
5	Left	2456.40	3054	597ml	19.5%	2428.12	3037.23	609ml	20%	✓	✓
6	Right	2027	2108	81ml	-3.8%	1994	2029	-34ml	-1.7%	✓	✓
7	Right	2969	2567	402 ml	13.5 %	3055.54	2671.61	383ml	12.57%	X	X
8	Left	2281.63	2250.37	-31ml	-1.37%	2599.31	2631.38	32ml	1.22%	X	X

Figure 1

Quantitative Evaluation

The pre-post Circumferential Arm Measurement table (Figure 1) illustrates the pre and post Yoga session figures and it shows that 62.5% of the patients in the audit group had an improvement in the Total limb volume percentage. However, 50% of patients reported a weight loss and it is evident from the figures that some patients appeared to have gained weight and this had an effect on the interpretation of the Total Limb volumes. There may be external factors which need to be taken into account when analysing this data such as if the participants were on a weight loss diet or undertaking other activity/exercises or concordance with hosiery etc. It is important to note that all patients in the group were in the maintenance phase of their treatment and therefore more significance could be associated with the results.

Domain	Improved QOL post Yoga	No Change in QOL post Yoga	Deterioration in QOL post Yoga
Function	87%	-	12.5%
Appearance	37.5%	25%	37.5% (? Because of Weight Loss)
Symptom	50%	37.5%	12.5%
Emotions	75%	25%	-
Overall QOL	37.5%	62.5%	-

Figure 2

The LYMQOL results shown in figure 2 & 3 shows a maintenance or improvement in the overall QOL Scores, with 62.5% maintaining their score and an improved QOL in 37.5%.

Results of LYMQOL showed that function improved in 87% of the group and emotional domain scores improved in 75% of the group.

The audit highlighted that 37.5% of patients reported a worsening of appearance of Limb post yoga, this may be due to 50% of the group having a weight loss.

The Emotional section of the LYMQOL could be quite subjective and may be dependent on a number of factors that may not be oedema specific and may be related to other areas of the patients' psycho-social life.



Here is just one of many patient comments and stories of how Yoga has made an impact to their lives...

Patient AH - Cohort 2:

I've said it so many times before unless you've experienced something first hand nobody really understands what you go through and this includes exercise classes. Due to not being quite perfect from birth (one hip only half formed) and following major surgery as a child normal aerobics, dance and other exercise classes weren't something I could do. I had very limited mobility in my left hip, but also as I couldn't stand on my left leg alone, so it made it difficult to do any exercises where I had to lift my right leg off the floor. I did try a water aerobics class but even that I found difficult, I still didn't have the mobility in my left leg, my balance wasn't good in the water but it also opened up another world of worries. I would find people staring at me. So it was easier not to do exercise classes than face the questions, the looks and judgements that even though you're a lot younger than some of the people in the class you're nowhere near as flexible.

So when I was asked if I wanted to join the seated yoga class I absolutely jumped at the chance! It was great knowing even if I couldn't do some of the exercises nobody would be laughing or judging. Everyone in the class would understand as we all had problems in different ways and we were all there to enjoy the class and some exercises. It has made a world of difference to me, I can now lift my legs myself, I can get into bed myself, the muscles in my legs are much stronger from the yoga classes, my mobility is much better, I've lost weight, my self-confidence has grown. I feel amazing after my class too, I feel like I could take on the world just because I've done that yoga class, I still have pretty heavy legs, but where I used to struggle to lift one leg on its own now I can lift them both at the same time. That for me is a minor miracle and I know that yoga classes have helped me immensely to be able to do that, I am so grateful to be part of my seated yoga class.

Yoga Trainer:

"The majority of the people that have attended the yoga sessions organised by Mary Warrilow at Lymphcare UK have been women, all of whom have been diagnosed with lymphoedema. During the first session, my observations were that most of these women had difficulty lifting affected limbs and in most cases the range of movement through associated joints was very limited. Over the period of just a few weeks with the use of props such as yoga straps to help clients lift their legs and in severe cases the use of a chair to elevate the legs before using straps. I also worked with modified versions of traditional yoga postures, incorporating the use of physio-balls to strengthen core, and pelvic floor muscles.

Energetically, it is often difficult to focus on a given area of the body; through discipline and the use of specific props as mentioned above, it is possible to educate the mind and body to become more sensitive towards feeling and recognising the points of resistance within the body in various postures, increasing body strength and flexibility extremely quickly. This has certainly been the case with all of the Lymph-oedema clients that have attended the sessions on a weekly basis.

They have learned how to use their breath to help to overcome stiffness and dysfunctional pain within the body. Many of these women have experienced such profound results that they have offered their own testimonials in support of the effects of yoga as a holistic approach that compliments conventional treatment, giving them a greater sense of self-worth and confidence to further support their recovery."

Qualitative Evaluation

Verbal and written feedback has been overwhelming, with patients expressing their desire for the yoga sessions to continue and they have been enthusing about the benefits to their overall physical, social and psychological wellbeing. The sessions have given patients an opportunity to meet and network with other individuals living with Lipoedema and Lymphoedema.

Patient Pilot Group	Function		Appearance		Symptoms		Emotions		Overall QOL	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Patient 1-TW	1.2	1.3	1.4	1.2	2.1	2.3	1.1	1.1	8	10
Patient 2-CP	1.4	1.3	2.0	1.8	2.3	2.3	2.6	2.5	8	8
Patient 3-DC	1.6	1.1	1.6	1.8	2.0	1.6	1.3	1.0	8	10
Patient 4-MC	1.5	1.4	3.2	3.2	3.3	3.1	1.8	1.8	7	7
Patient 5-KK	1.2	1.1	1.6	1.8	1.0	1.3	1.5	1.3	9	9
Patient 6-MB	1.4	1.3	2.0	1.2	1.6	2.0	2.1	2.0	7	8
Patient 7-NF	1.7	1.5	2.2	2.4	2.1	1.6	2.3	1.5	7	7
Patient 8-CB	1.2	1.1	1.0	1.0	1.5	1.6	1.6	1.3	9	9

Figure 3

Recommendations and Future plans

Lymphcare UK are continuing to provide the Therapeutic LymphYoga sessions and continue to have positive feedback.

We plan to undertake a more robust, scientific approach to evaluating and analysing the outcomes of Yoga in Lymphoedema/Lipoedema. A comparative Pilot study is planned and it would be useful to include perometer, moisture meter, Tonometry and assessment of range of movement as well as further QOL outcomes.

As a growing Social Enterprise and Community Interest Company Lymphcare UK are keen to try and develop further sessions for all parts of the local community.

Lymphcare UK are now working in partnership and have developed a Therapeutic LymphYoga Training Course for Health Care Professionals and Therapists.



Kay Morris from Innaharmony a qualified Wheel of Yoga Teacher and Trainer.

References
Keeley V (2008) Quality of Life assessment tools in Chronic Oedema. British Journal of Community Nursing 13 (10): 522-7
Louden A, Barnett T, Pillar N, Imminck M, Visentin D, and Williams, A (2012). The effects of Yoga on Women with Secondary arm lymphoedema from breast Cancer Treatment. BMC Complementary and Alternative Medicine.