



Client outcomes of a health promotion program for older people with venous leg ulcers

Suzanne Kapp Clinical Nurse Consultant Wound Management and Research

Charne Miller Researcher

Lisa Donohue Researcher

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Background

- Chronic disease
- Venous leg ulcers
- Health promotion
- The Leg Ulcer Prevention Program (LUPP)

The Leg Ulcer Prevention Program

Components:

- Multimedia Package
- LUPP Folder
- Summary Sheets
- Activities



Session Topics:

1. What is a leg ulcer?
2. Leg ulcer treatment
3. Getting active
4. Nutrition & hydration
5. Looking after your skin
6. Compression stockings & keeping your ulcer healed

LUPP Evaluation

- ☆ Client knowledge and behaviour
 - ☆ Client satisfaction
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- Nurse satisfaction
 - Compression stocking adherence and ulcer recurrence

Study Design

Pre and Post intervention study of client knowledge and behaviour

Eligibility:

- Has a venous leg ulcer
- Spoke English
- Receiving care at participating RDNS Sites

Recruitment: 31st March 2009 – 17th March 2010

Data collection: Matched client Pre and Post LUPP Questionnaire

(Client Satisfaction Survey included in Post LUPP Questionnaire)

Client Knowledge Results

Multi-choice questions

		Pre-test (% correct)	Post-test (% correct)	p=
Problem with skin / legs ... contact doctor/ nurse immediately	n=154	74.0	91.6	.000
Leg ulcer is ... a skin break taking > 6 weeks to heal	n=152	67.1	77.6	.029
Best way to avoid another leg ulcer is ... wear stockings	n=154	65.6	94.8	.000
Most important treatment ... compression bandaging	n=152	63.8	88.8	.000
Most common cause of leg ulcers ... poor veins	n=152	63.2	80.9	.000

✓ *All demonstrated statistically significant improvement in knowledge*

Multi-choice questions (continued)

		Pre-test (% correct)	Post-test (% correct)	p=
I should check the skin on my legs ... every day	n=154	58.4	77.3	.000
I should elevate my legs ... 3-4 times a day	n=155	57.4	76.1	.000
The most important activity is... walking	n=153	54.2	80.4	.000
An optimal diet ... includes all major food groups	n=152	54.6	68.4	.009
Most people should drink ... 8 or > glasses water daily	n=155	48.4	72.3	.000
A dressing should ... keep the ulcer moist	n=152	28.9	51.3	.000

✓ *All demonstrated statistically significant improvement in knowledge*

True / false questions

✓ *Significant:* questions regarding nutrition, activity and exercise, skin care, treatment of venous ulcer

✗ *Not significant:*

		Pre-test (% correct)	Post-test (% correct)	p=
Compression will fix the problem with my veins (false)	n=154	24.7	18.8	.188
Wounds should be cleansed at every dressing (false)	n=155	1.9	6.5	n/a*

Client Behaviour Results

Activity and Exercise

✓ *Significant:*

		Pre-test (%)	Post-test (%)	p=
Client usually elevate legs when sitting / resting	n=154	72.1	83.1	.012
Client believes has been keeping active	n=155	69.0	79.4	.014
Client recommended to do heel raises and squats	n=155	26.5	95.5	.000
Client regularly does heel raises and squats	n=154	14.9	66.2	.000

✗ *Not significant:*

- Degree of physical activity – walks frequently
- Client usually crosses legs when sitting
- Client recommended to elevate legs when sitting / resting

Nutrition

- ✘ *Not significant:* all behaviours in the area of nutrition
 - Usual food intake
 - Fluid intake
 - Supplementation recommendation and use
 - Multivitamins recommendation and use
 - Client believes eating and drinking well

Skin Care

		Pre-test (%)	Post-test (%)	p=
Care plan includes use of a soap substitute	n=155	24.5	70.3	.000
Soap substitute is being used	n=155	30.3	67.7	.000
Care plan includes use of a moisturiser	n=156	73.1	92.9	.000
Moisturiser is being used	n=154	83.1	92.9	.004

- ✓ All areas demonstrated significant improvement in behaviour

Compression Use

	Pre-LUPP	After-LUPP
No compression	33.2%	13.5%
Best practice 4 layer system	13.5%	41.5%

Changes to compression:

54.9% - due to LUPP

- 67.9% - led to 4 layer system

30.7% - unrelated to LUPP

- 27.7% - led to 4 layer system

- ✓ *Significant.* Type of compression that was changed to and whether change was a result of LUPP
($\chi^2 (2)=41.291, p<0.000$)

Client Satisfaction

Satisfaction with LUPP

95% or more clients responded that LUPP:

- Improved understanding
- Increased knowledge
- Received information not known beforehand
- Computer was excellent

100% - Valuable to have the nurse during LUPP

“This program [LUPP] could be a life saver to all ulcer victims.”

“This program [LUPP] is an excellent way to help people to understand the problem and help themselves.”

Discussion

- LUPP changed:
 - ✓ Client knowledge in all areas targeted
 - ✓ Behaviours in the areas of activity and exercise, skin care and compression bandaging use
- Older people engaged with multimedia
- Clients were highly satisfied with LUPP
- Favourable results from nurses perspective

Suzanne Kapp
skapp@rdns.com.au
95365336

