

平成27年度

事業報告書

がんプロフェSSIONAL
養成基盤推進プラン

QOL・がん看護学教育 国際セミナー

リンパ浮腫管理

—世界的な研究者の視点から—



報告書について

慶應義塾大学大学院健康マネジメント研究科
教授 小松 浩子

平成 24 年度よりスタートしたがんプロフェッショナル養成基盤推進プラン「高度がん医療開発を先導する専門家の養成」事業も 4 年目を迎えました。本がんプロフェッショナル養成基盤推進プランでは様々な活動をしています。

慶應義塾大学大学院健康マネジメント研究科では、【高度最先端がん医療を支える専門看護師養成コース（修士課程）】【がん看護トランスレーショナルリサーチコース（博士課程）】における教育・研究を推進しています。これらのコースではグローバルな視点から活躍できるがん看護研究者と高度実践看護師の育成をめざしています。その一環としてがん看護学教育国際セミナーを継続開催してきました。

今回のがん看護学教育国際セミナーでは本事業全体で取り組んでいる「がんサバイバーシップ」に焦点をあて、がん患者のクオリティオブライフ（QOL）の向上をめざした「リンパ浮腫管理」について学ぶことにしました。

リンパ浮腫ケアの世界的リーダーであるノッティンガム大学の Christine Moffatt 教授をお招きし、ご講演頂きました。この報告書は Moffatt 教授が取り組んでこられたリンパ浮腫管理に関する広範な研究や、各国のリンパ浮腫管理の実態およびその質を向上させるための取り組みについて貴重な内容をまとめたものです。どうぞ一読頂き、今後の実践や研究に生かして頂ければ幸いに存じます。



がんプロフェッショナル養成基盤推進プラン がん看護学教育国際セミナー

リンパ浮腫管理 —世界的な研究者の視点から—

第5回 QOL・がん看護学教育国際セミナーでは Christine Moffatt 教授をお招きし、「リンパ浮腫管理」をテーマにご講演頂きました。医療関係者、学生を含む多くの参加者は熱心に講義に耳を傾けていました。



Seminar Schedule

- 日 時**：2016年2月26日(金) 18:00～19:50
- 会 場**：慶應義塾大学看護医療学部(信濃町キャンパス)
202号室
- 司 会**：小松浩子
(慶應義塾大学大学院健康マネジメント研究科 教授)
- 講 師**：Christine Moffatt 先生
CBE, FRCN, Ph.D., MA, RGN, DN
Professor of Clinical Nursing Research,
School of Health Sciences,
Faculty of Medicine and Health Sciences,
The University of Nottingham

Unraveling the Problem of Chronic Oedema: a Global response

リンパ浮腫管理 –世界的な研究者の視点から–

がんの治療に伴って生じるリンパ浮腫はがん患者の日常生活を妨げる症状の一つです。Quality of life を維持、向上させるためにはリンパ浮腫の予防、管理が不可欠になります。

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Unraveling the Problem of Chronic Oedema: a Global response

Christine Moffatt, CBE PhD.MA.RGN.FRCN
Professor of Clinical Nursing Research

Honorary Visiting Professor, Kanazawa University, Japan
Honorary Professor, Cardiff University, Wales
Honorary Professor, Western Ontario University, Canada
Honorary Professor, Glasgow University, Scotland

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Overview of the session:

- Different clinical presentations of lymphoedema
- Problems in defining prevalence and incidence
- A UK epidemiological view of lymphoedema
- A global view of the impact of chronic oedema
- LIMPRINT : A global response

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Lymphoedema : definition

- tissue swelling due to a failure of lymphatic drainage




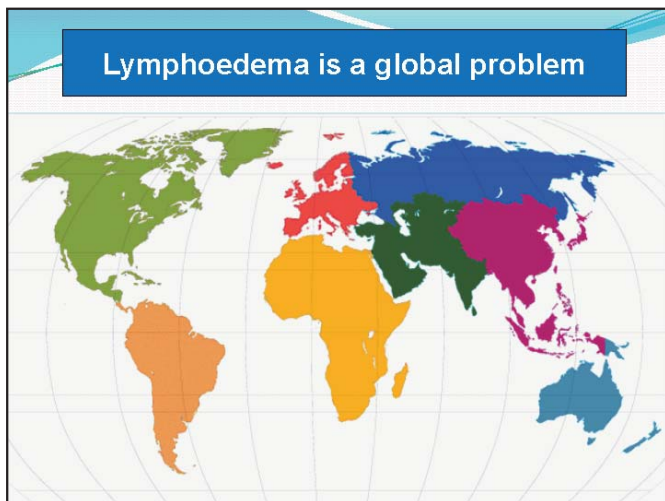
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Problems of Definition

- What is Lymphoedema
- Defining chronic oedema within the population
- Acceptance as a Neglected Tropical Disease rather than a global health problem in all countries





“Chronic oedema”:

Chronic oedema present for more than 3 months

Associated with oedema and tissue changes

(Moffatt et al Q J Med 93: 731-8 (2003))

Lymphoedema:

a) **Primary:**

- may be family history (over 30 genes identified, only accounts for 20% of cases)
- may be other associated features and syndromes

b) **Secondary:**

- should be an identifiable cause, e.g. cancer treatment, trauma



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Secondary lymphoedemas

- arms – secondary to treatment for breast cancer.
- legs – secondary to inguinal node dissections, other surgery eg. Total Hip Replacement

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Chronic secondary lymphoedema



Late onset breast cancer related lymphoedema

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Chronic venous disease



Always associated with lymphatic damage to the initial lymphatics and in areas of lipodermatosclerosis

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Oedema associated with immobility

- Immobility (gravitational oedema)
- chronic conditions, e.g. neurological respiratory
- chair-bound / sleep in chair (multiple mechanisms cause oedema)

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Spina Bifida

Current study in the UK to understand prevalence, impact and disease mechanisms

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Obesity & Lymphatic failure

Multiple mechanisms

- Inflammation
- Insufficient lymphatics to drain adipose tissue

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Oedema of advanced cancer



Invasive tumour within lymphatic circulation

Obstructive oedema due to tumour and cancer treatment



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The complex aetiology of chronic oedema

- Lymphatic
- Venous
- Hypoalbuminaemia
- Immobility
- Infection
- Drugs



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What is the size of the problem?



Lack of Epidemiology :

- 140 to 250 million worldwide
- 3% of western populations
- 30%+ Breast cancer related
- 40 – 60% gynaecological cancers
- 40/50% venous ulcer patients
- 90% of spina bifida and disabled



Defining the problem

- Taking a public health approach
- Understanding who is affected in the population
- Defining the impact on patients', carers and the health service
- Identifying levels of unmet need and service provision

Methodological challenges (1)


- What is Lymphoedema ? Issues of definition
- How do we measure it?
- Limb volume methods of assessment ?
- Use of mixed methods of assessment?
- Prevalence vv incidence data



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Methodological challenges (2)

- Defining stage and severity of lymphoedema
 - Lymphoedema as a consequence of cancer
 - Lymphoedema as a neglected tropical disorder
- Tissue profiles vary in different groups
 - Different mechanisms involved
- Genetic predisposition (polymorphisms)
- Research vv disease registers
 - Population based studies are expensive and complex to undertake
 - Limitations of cross sectional vv longitudinal studies
 - Lack of real life health service data
 - Poor quality data



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No Internationally Validated Method of Classification

- Classification is based on tissue characteristics
- Methods to measure pitting and fibrosis are poor
- Different stages of oedema may respond differently to compression



The Centre for Research and Implementation of Clinical Practice
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Prevalence study in South West London

(Moffatt et al 2003 . Quarterly Journal of Medicine)

AIM : to identify all patients with chronic oedema in the health services of one defined urban area

- Prospective clinical evaluation of all patients and random sample (N=298)

Results


- 823 patients in population of 619,000
- 1.33 per 1000 general population
- 5.4 per 1000 in those aged >65years
- 10.3 per 1000 in those aged >85years
- Projected national prevalence in England and Wales >100,000 (current study only identified patients known to professionals.)

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Care Provision

- 36% receiving no treatment
- 54% had seen a specialist
- 12% received care from community nurses
- 24% saw other specialists such as dermatology, vascular surgery

Within the random sample of 288 patients 69% had no correct diagnosis



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How good is the control of swelling


- 80% of those having active treatment had controlled swelling
- 29.4% of those not having treatment are controlled

Women had better control of swelling

62.5% women
44.3% men

- Arm swelling controlled in 83%
- Leg swelling in 42%


80% arm patients were receiving care
42% of leg patients were receiving care

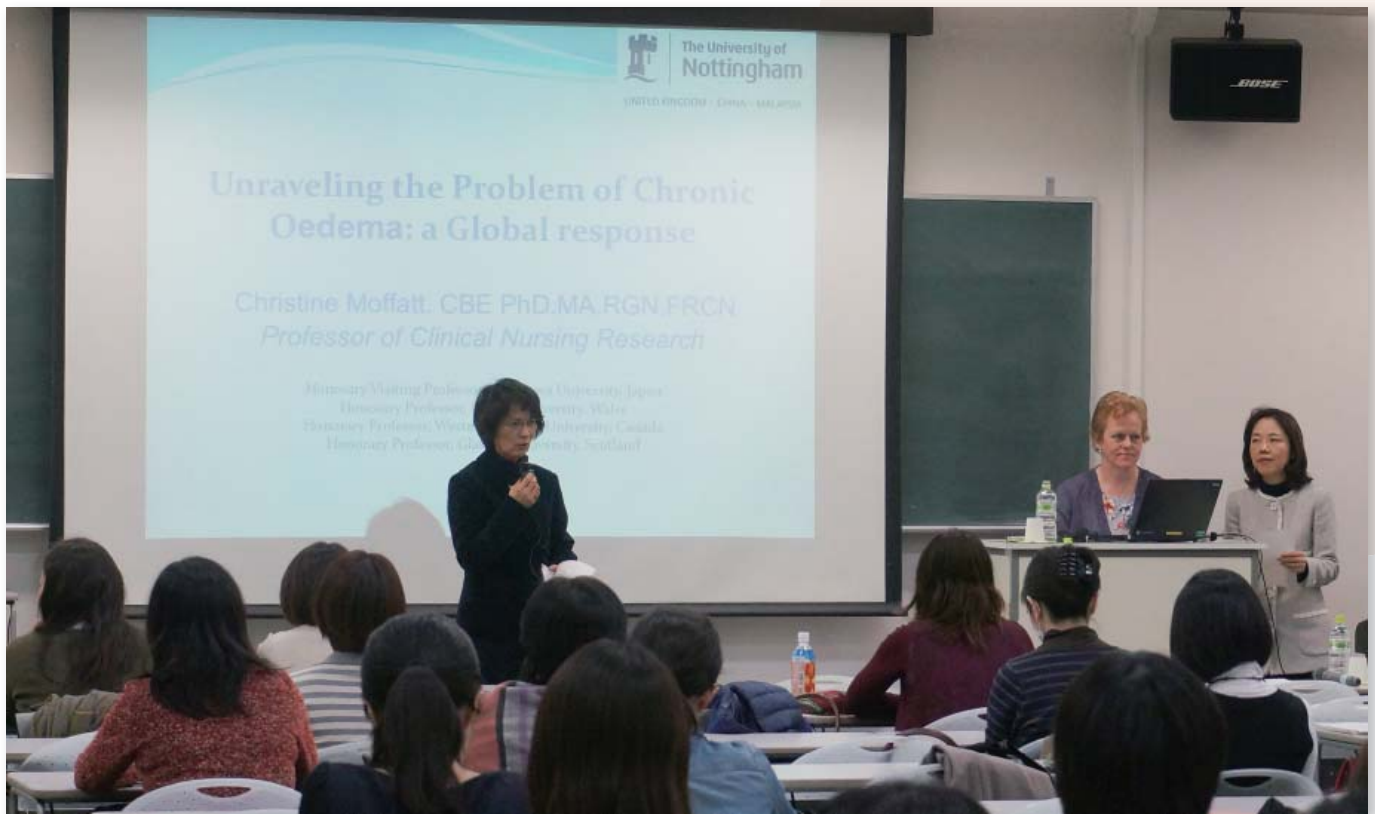


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Levels of uncontrolled swelling

<45 years	• 11.9%
45-64 years	• 14.2%
65- 74 years	• 23.9%
75-84 years	• 42.2%
> 85 years	• 59%





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Unraveling the Problem of Chronic Oedema: a Global response

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 Visiting Professor, Western University, Canada
 Honorary Professor, University of Scotland

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Acute Infections



- 29% had an infection in last 12 months
- 16 > 3 episodes in the last year
- 27% admitted for IV antibiotics
- 15% had at least one admission during their condition

Mean length of stay - 12 days

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Impact on Employment



- 80% had taken time off work
- Mean time from work 10.5 days
- 9% employment was affected
- 2% changed jobs
- 8% had to give up work**

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Pain in Lymphoedma



- 50% of patients experienced pain
- 56% took regular analgesia
- Pain was rarely controlled
- This differs from professional views

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Prevalence study in Derby City (2015)

AIM : to identify all patients with chronic oedema in the health services of one defined urban area
 Prospective clinical evaluation of all patients and random sample

- >984 patients identified in 246,900 population
- >Prevalence 3.99 per 1000 population
 - >10.31 per thousand (age 65 to 74)
 - >28.57 per thousand (age >85 years)
- >Mean age 68.1 years

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Profile of patients within lymphoedema service (n=688)

Classification	Number	Percentage
Secondary Lymphoedema	246	37%
Lymphovenous	169	25%
Primary lymphoedema	80	12%
Venous disease	60	9%
Advanced cancer	25	2%
Heart Failure	7	1%
Lipoedema	8	1%
Other types	43	6%
Awaiting correct diagnosis	24	4%
At high risk	21	3%

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Levels of obesity in specialist service (n=377 /688)

BMI	Number	Percentage
< 25	51	14%
25 - 29.9	64	17%
30-39.9	165	44%
>40	91	25%

69% are obese or morbidly obese

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- ### Leg Ulceration and Leg Swelling in Community Patients (356)
- 356 community patients had either leg ulceration or swelling
 - 299 (84%) had leg swelling
 - 168 (47%) had leg ulceration
 - Of the patients with leg ulceration 120 (71%) had concomitant leg swelling

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Prevalence of chronic oedema in two areas of England

	Derby City (2015)	South West London (2003)
TOTAL	3.99/1000	1.33/1000

Why do these prevalence statistics differ?

- Definition of lymphoedema the same
- **A real difference in prevalence**
- Different age/ gender structure
- Identification through health professionals:
 - greater participation
 - greater awareness



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Research in the UK AND France on children and families with Lymphoedema

- Long search for diagnosis
- Poor professional knowledge
- Lack of access to care
- Psychological burden on children and families

(Moffatt et al 2008 Int Journal of Wounds)

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Evidence of Impact

- Reduced quality of life
- Social stigma
- Impact on employment
- Financial implication for families
- Pain
- Disability with severity



Treatment improves QOL
Moffatt et al 2016


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Impact in developing countries

- Lack of focus on morbidity
- Poor professional knowledge
- Fear from the community
- Poverty affects hygiene and use of shoes
- No access to dressings / bandages
- Traditional healers used scarification



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Young women cannot marry due to stigma and live in poverty and misery

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A Global Response

Strategic challenges :

- Define the size and impact of the problem
- Dispel the myths
- Prove the cost to health services
- Develop an international methodology
- Strong partnerships

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International Consensus: Best Practice for the Management of Lymphoedema

Based on Cochrane Systematic Reviews




•12 systematic reviews
•2013 /2014
•Second edition


LIMPRINT Project



INTERNATIONAL LYMPHOEDEMA FRAMEWORK

➢ Lymphoedema Impact and Prevalence – International Lymphoedema Framework

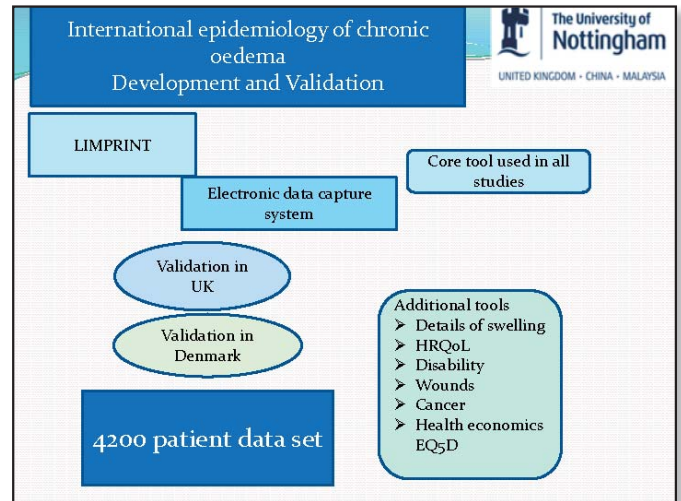

Belong Together



INTERNATIONAL LYMPHOEDEMA FRAMEWORK

- The largest epidemiology dataset on chronic oedema
- Prevalence of chronic oedema and wounds in each country
- An international profile of prevalence
- Impact of chronic oedema on patients, health care systems and society
- Greater understanding of deficits in care delivery
- Help with information for reimbursement

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International epidemiology of chronic oedema

LIMPRINT

Countries :

- UK
- USA
- Canada
- Denmark
- France
- Japan
- Turkey
- India


Japan prevalence - 908 patients

France prevalence - 1750 patients

Denmark - 900 patients


United Kingdom - 10,057 patients

Predicted final sample > 17,000 patients



The Silent Epidemic

- **Chronic oedema is going to increase massively due to demographic changes**
 - > Increasing elderly population (highest prevalence in the very elderly)
 - > Increasing obesity (predicted that over 90% of patients with morbid obesity have chronic oedema)
 - > Decreased mobility
 - > More patients will survive cancer and will retain a life time risk
 - > Association with long term conditions



THANK YOU





10大学事業

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高度がん医療開発を先導する専門家の養成
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