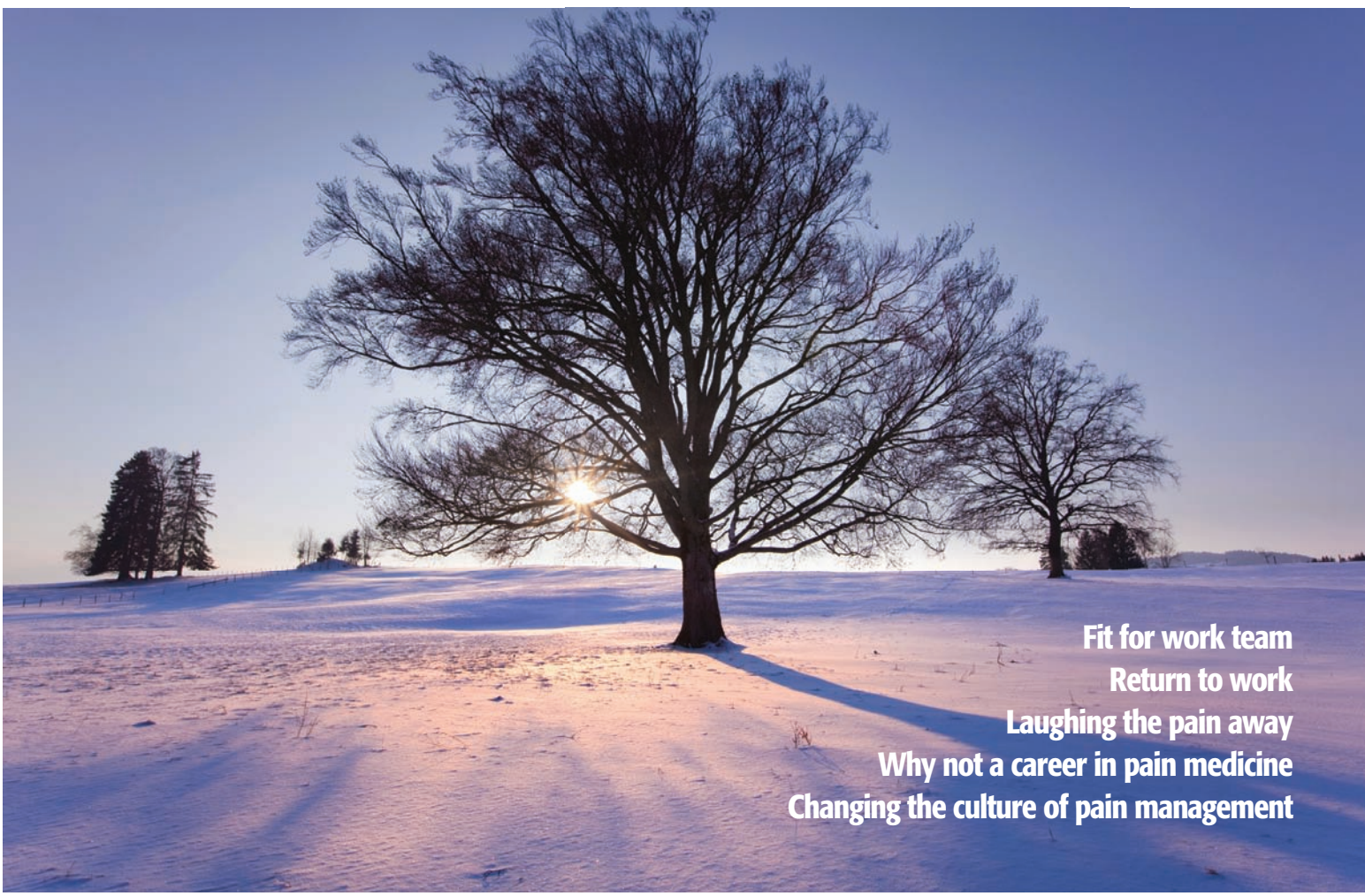
DECEMBER 2013 VOLUME 11 ISSUE 4

PAIN NEWS

A PUBLICATION OF THE BRITISH PAIN SOCIETY

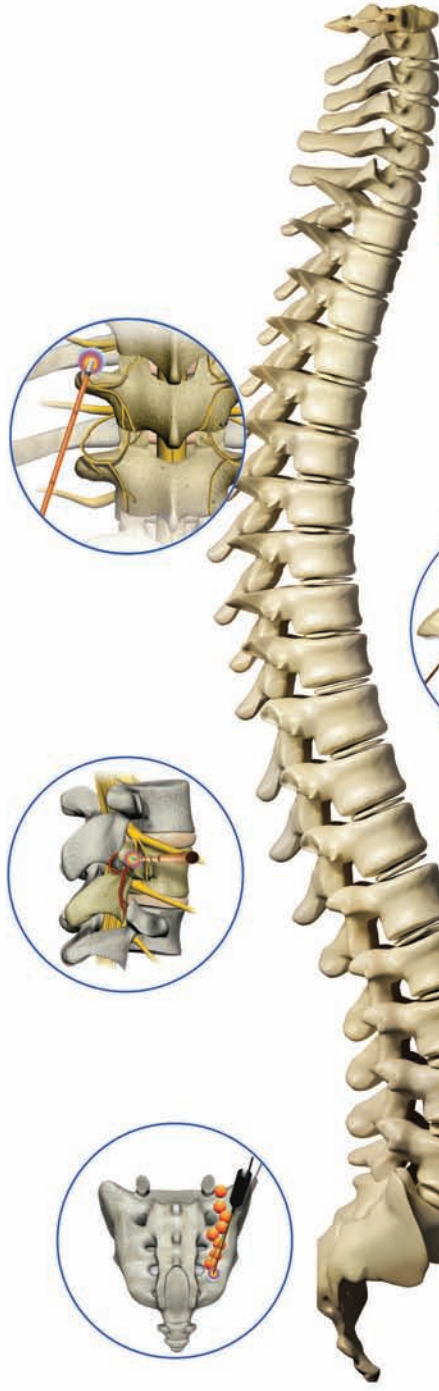


Fit for work team
Return to work
Laughing the pain away
Why not a career in pain medicine
Changing the culture of pain management

THE BRITISH PAIN SOCIETY

ISSN 2050–4497

In Pain?



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CYMBALTA® (DULOXETINE) ABBREVIATED PRESCRIBING INFORMATION Presentation Hard gastro-resistant capsules, 30mg or 60mg of duloxetine. Also contains sucrose. **Uses** Treatment of major depressive disorder. Treatment of generalised anxiety disorder. Treatment of diabetic peripheral neuropathic pain (DPNP) in adults. **Dosage and Administration** *Major Depressive Disorder* Starting and maintenance dose is 60mg once daily, with or without food. Dosages up to a maximum dose of 120mg per day have been evaluated from a safety perspective in clinical trials. However, there is no clinical evidence suggesting that patients not responding to the initial recommended dose may benefit from dose up-titrations. Therapeutic response is usually seen after 2-4 weeks. After establishing response, it is recommended to continue treatment for several months, in order to avoid relapse. In patients responding to duloxetine, and with a history of repeated episodes of major depression, further long-term treatment at 60 to 120mg/day could be considered. *Generalised Anxiety Disorder* The recommended starting dose in patients with generalised anxiety disorder is 30mg once daily, with or without food. In patients with insufficient response the dose should be increased to 60mg, which is the usual maintenance dose in most patients. In patients with co-morbid major depressive disorder, the starting and maintenance dose is 60mg once daily. Doses up to 120mg per day have been shown to be efficacious and have been evaluated from a safety perspective in clinical trials. In patients with insufficient response to 60mg, escalation up to 90mg or 120mg may therefore be considered. After consolidation of the response, it is recommended to continue treatment for several months, in order to avoid relapse. *Diabetic Peripheral Neuropathic Pain* Starting and maintenance dose is 60mg daily, with or without food. Doses above 60mg/day, up to a maximum dose of 120mg/day in evenly divided doses, have been evaluated from a safety perspective. Some patients that respond insufficiently to 60mg may benefit from a higher dose. The medicinal response should be evaluated after 2 months treatment. Additional response after this time is unlikely. The therapeutic benefit should regularly be reassessed. Abrupt discontinuation should be avoided. When stopping treatment with Cymbalta the dose should be gradually reduced over at least one to two weeks to reduce the risk of withdrawal reactions. If intolerable symptoms occur following a decrease in the dose or upon discontinuation of treatment, then resuming the previously prescribed dose may be considered. Subsequently, continue decreasing the dose, but at a more gradual rate. **Contra-indications** Hypersensitivity to any of the components. Combination with MAOIs. Liver disease resulting in hepatic impairment. Use with potent inhibitors of CYP1A2, eg, fluvoxamine, ciprofloxacin, enoxacin. Severe renal impairment (creatinine clearance <30ml/min). Should be used in pregnancy only if the potential benefit justifies the potential risk to the foetus. Breast-feeding is not recommended. Initiation in patients with uncontrolled hypertension that could expose patients to a potential risk of hypertensive crisis. **Precautions** Do not use in children and adolescents under the age of 18. No dosage adjustment is recommended for elderly patients solely on the basis of age. However, as with any medicine, caution should be exercised. Data on the use of Cymbalta in elderly patients with generalised anxiety disorder are limited. Use with caution in patients with a history of mania, bipolar disorder, or seizures. As with other serotonergic agents, serotonin syndrome, a potentially life-threatening condition, may occur with duloxetine treatment, particularly with concomitant use of other serotonergic agents, as described under 'Interactions' (below). Caution in patients with increased intra-ocular pressure or those at risk of acute narrow-angle glaucoma. Duloxetine has been associated with an increase in blood pressure and clinically significant hypertension in some patients. In patients with known hypertension and/or other cardiac disease, blood pressure monitoring is recommended as appropriate, especially during the first month of treatment. Use with caution in patients whose conditions could be compromised by an increased heart rate or by an increase in blood pressure. For patients who experience a sustained increase in blood pressure while receiving duloxetine, consider either dose reduction or gradual discontinuation. Caution in patients taking anticoagulants or products known to affect platelet function, and those with bleeding tendencies. Hyponatraemia has been reported rarely, predominantly in the elderly. Caution is required in patients at increased risk for hyponatraemia, such as elderly, cirrhotic, or dehydrated patients, or patients treated with diuretics. Hyponatraemia may be due to a syndrome of inappropriate anti-diuretic hormone secretion (SIADH). Adverse reactions may be more common during concomitant use of Cymbalta and herbal preparations containing St John's Wort. Monitor for suicidal thoughts, especially during first weeks of therapy, dose changes, and in patients under 25 years old. Since treatment may be associated with sedation and dizziness, patients should be cautioned about their ability to drive a car or operate hazardous machinery. Cases of akathisia/psychomotor restlessness have been reported for duloxetine. Duloxetine is used under different trademarks in several indications (major depressive disorder, generalised anxiety disorder, stress urinary incontinence, and diabetic neuropathic pain). The use of more than one of these products concomitantly should be avoided. Cases of liver injury, including severe elevations of liver enzymes (>10-times upper limit of normal), hepatitis, and jaundice have been reported with duloxetine. Most of them occurred during the first months of treatment. Duloxetine should be used with caution in patients with substantial alcohol use or with other drugs associated with hepatic injury. Capsules contain sucrose. Patients with rare hereditary problems of fructose intolerance, glucose-galactose malabsorption, or sucrose-isomaltase insufficiency should not take this medicine. **Interactions** Caution is advised when taken in combination with other centrally acting medicinal products or substances, including alcohol and sedative medicinal products; exercise caution when using in combination with antidepressants. In rare cases, serotonin syndrome has been reported in patients using SSRIs/SNRIs concomitantly with serotonergic agents. Caution is advisable if duloxetine is used concomitantly with serotonergic agents like SSRIs/SNRIs, tricyclics, MAOIs like moclobemide and linezolid, St John's Wort, antipsychotics, triptans, tramadol, pethidine, and tryptophan. Undesirable effects may be more common during use with herbal preparations containing St John's Wort. *Effects on other drugs:* Caution is advised if co-administered with products that are predominantly metabolised by CYP2D6 (risperidone, tricyclic antidepressants [TCAs], such as nortriptyline, amitriptyline, and imipramine) particularly if they have a narrow therapeutic index (such as flecainide, propafenone, and metoprolol). **Undesirable Effects** The majority of common adverse reactions were mild to moderate, usually starting early in therapy, and most tended to subside as therapy continued. Those observed from spontaneous reporting and in placebo-controlled clinical trials in depression, generalised anxiety disorder, and diabetic neuropathic pain at a rate of ≥1/100, or where the event is clinically relevant, are: *Very common (≥1/10):* Headache, somnolence, nausea, dry mouth. *Common (≥1/100 and <1/10):* Weight decrease, palpitations, dizziness, lethargy, tremor, paraesthesia, blurred vision, tinnitus, yawning, constipation, diarrhoea, abdominal pain, vomiting, dyspepsia, flatulence, sweating increased, rash, musculoskeletal pain, muscle spasm, dysuria, urinary frequency, ejaculation disorder, ejaculation delayed, decreased appetite, blood pressure increased, flushing, falls, fatigue, erectile dysfunction, insomnia, agitation, libido decreased, anxiety, orgasm abnormal, abnormal dreams. Clinical trial and spontaneous reports of anaphylactic reaction, hyperglycaemia (reported especially in diabetic patients), mania, hyponatraemia, SIADH, hallucinations, dyskinesia, serotonin syndrome, extra-pyramidal symptoms, convulsions, akathisia, psychomotor restlessness, glaucoma, mydriasis, syncope, tachycardia, supra-ventricular arrhythmia (mainly atrial fibrillation), hypertension, hypertensive crisis, epistaxis, gastritis, haematochezia, gastro-intestinal haemorrhage, hepatic failure, hepatitis, acute liver injury, angioneurotic oedema, Stevens-Johnson syndrome, trismus, and gynaecological haemorrhage have been made. Cases of suicidal ideation and suicidal behaviours have been reported during duloxetine therapy or early after treatment discontinuation. Cases of aggression and anger have been reported, particularly early in treatment or after treatment discontinuation. Cases of convulsion and tinnitus have been reported after treatment discontinuation. Discontinuation of duloxetine (particularly abrupt) commonly leads to withdrawal symptoms. Dizziness, sensory disturbances (including paraesthesia), sleep disturbances (including insomnia and intense dreams), fatigue, agitation or anxiety, nausea and/or vomiting, tremor, headache, irritability, diarrhoea, hyperhydrosis, and vertigo are the most commonly reported reactions. The heart rate-corrected QT interval in duloxetine-treated patients did not differ from that seen in placebo-treated patients. No clinically significant differences were observed for QT, PR, QRS, or QTcB measurements between duloxetine-treated and placebo-treated patients. In clinical trials in patients with DPNP, small but statistically significant increases in fasting blood glucose were observed in duloxetine-treated patients compared to placebo at 12 weeks. At 52 weeks there was a small increase in fasting blood glucose and in total cholesterol in duloxetine-treated patients compared with a slight decrease in the routine care group. There was also an increase in HbA_{1c} in both groups, but the mean increase was 0.3% greater in the duloxetine-treated group. *For full details of these and other side-effects, please see the Summary of Product Characteristics, which is available at http://www.medicines.org.uk/emc/.* **Overdose** Cases of overdoses, alone or in combination with other drugs, with duloxetine doses of 5400mg have been reported. Some fatalities have occurred, primarily with mixed overdoses, but also with duloxetine alone at a dose of approximately 1000mg. Signs and symptoms of overdose (duloxetine alone or in combination with other medicinal products) included somnolence, coma, serotonin syndrome, seizures, vomiting, and tachycardia. **Legal Category** POM **Marketing Authorisation Numbers** EU/1/04/296/001, EU/1/04/296/002 **Basic NHS Cost** £22.40 per pack of 28 X 30mg capsules. £27.72 per pack of 28 X 60mg capsules. **Date of Preparation or Last Review** July 2013 **Full Prescribing Information is Available From** Eli Lilly and Company Limited, Lilly House, Priestley Road, Basingstoke, Hampshire, RG24 9NL Telephone: Basingstoke (01256) 315 000 E-mail: ukmedinfo@lilly.com Website: www.lillypro.co.uk CYMBALTA® (duloxetine) is a registered trademark of Eli Lilly and Company.

UKCYM01679b July 2013

References:

1. Goldstein DJ, Lu Y, Detke MJ, et al. Duloxetine vs placebo in patients with painful diabetic neuropathy. Pain 2005;116:109-18.

2. Hall JA et al. Poster presented at the 25th American Pain Society Meeting; 2006; May 3-6; San Antonio, USA.

3. Lilly. Cymbalta [EU] Summary of Product Characteristics, July 2013.

4. British Pain Society, Pain Assessment and Management Pathways: Neuropathic Pain. Available at http://bps.mapofmedicine.com/evidence/bps/index.html Acccessed 6/6/13

Adverse events should be reported. Reporting forms and further information can be found at: www.mhra.gov.uk/yellowcard.
Adverse events and product complaints should also be reported to Lilly: please call Lilly UK on 01256 315 000.

THE BRITISH PAIN SOCIETY
An alliance of professionals advancing the understanding and management of pain for the benefit of patients

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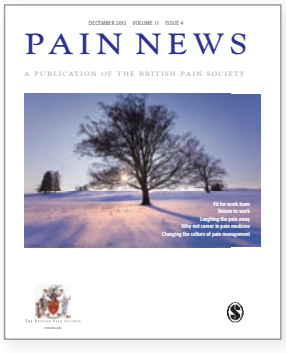

The editor welcomes contributions including letters, short clinical reports and news of interest to members, including notice of meetings.
Next submission deadline : 10th January 2014

Material should be sent to:

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Book reviews

End stuff


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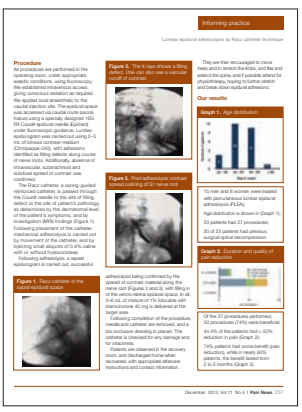
Can we change the culture of pain management?
Dr John D Loeser


News
Northern Ireland Pain Commissioning Meeting
Dr Pamela F Bell


Informing practice
Lumbar epidural adhesiolysis by Racz catheter technique


End stuff
Laughing the pain away
Shruthi Rayen

British Pain Society Calendar of Events

2014

THE BRITISH PAIN SOCIETY

Primary & Community Care SIG Meeting
Friday 17th January
Churchill House, London

Cancer Pain (30th Study Day)
Monday 10th February
Churchill House, London

Orofacial Pain (31st Study Day)
Tuesday 25th March
Churchill House, London

Annual Scientific Meeting
Tuesday 29th April to Thursday 1st May
Manchester Central, Manchester

Musculoskeletal Pain (32nd Study Day)
Tuesday 17th June
Churchill House, London

Philosophy & Ethics SIG Annual Conference
Monday 30th June – Thursday 3rd July
Rydal Hall, Ambleside, Cumbria

Patient Liaison Committee – Annual Seminar
Thursday 23rd October
Churchill House, London

Topic TBC (33rd Study Day)
Monday 24th November
Churchill House, London

More information can be found on our website http://www.britishpainsociety.org/meet_home.htm
Or email meetings@britishpainsociety.org

Editorial

Happy Christmas

Thanthullu Vasu

The British Pain Society

Pain News
11(4) 203–204

SAGE

On behalf of *Pain News* and our Society, I wish you all a Happy Christmas:

Time does not change us;
It just unfolds us.

Max Frisch, Swiss playwright, 1911–1991

I can't believe that it is already 3 years since I took over the responsibility of editing our newsletter; times have changed, and the same applies to *Pain News* also. Thanks to all our members and their contributions, there are more interesting articles and interactions through our newsletter, and we have reached the next step in its evolution now! In March 2014, I will be handing over this responsibility to a wonderful team of experts and be assured that our newsletter is in a better position than ever.

The aim of our newsletter is to express the views of our wider multidisciplinary membership and to make our members aware of the excellent work done by the Executives, Council and in fact the whole membership. I am thankful to the Council who in the last year have approved two more Associate Editor posts in addition to the Editor post. Considering the increasing amount of articles being submitted and the huge increase in the activities of the Society, this has been felt as essential to keep with the pace.

I am happy to inform you that Dr Arasu Rayen from Birmingham has been selected as the next Editor by the Executive Committee. I am sure our regular readers will know that Arasu has contributed regularly to our newsletter via his interesting *Rayen's Column* for the last three years. Being a keen believer in multidisciplinary team work for pain management, he will be the right person to lead *Pain News*. Among his excellent credentials include his vital role in the Committee of the West Midlands Pain Society, as Examiner for the Royal College of Anaesthetists, being a Course Director for various pain courses, lecturer in various national meetings and an excellent variety of his published articles. He will be taking over as the new Editor from next April after observing one issue of our newsletter in full preparation.

We received a variety of applications for the Associate Editor posts from various specialties, including nursing, psychology and physiotherapy. At the time of writing of this editorial, the Executives have assured me that *all* the applicants would be offered a vital role in the newsletter and the Society. I sincerely thank all the applicants for their interest in these posts and am sure that the newsletter would be in a much better position with this excellent team.

If we don't change direction soon,
We'll end up where we're going.

'Professor' Irwin Corey, Comic Film actor and Activist

In this issue of our newsletter, we are fortunate to have the transcript of the main lecture of the Philosophy and Ethics Special Interest Group (SIG) meeting delivered by Dr John Loeser. As many of us know well, Dr Loeser is a past President of the International Association for the Study of Pain and the American Pain Society; he has edited the famous textbook *Bonica's Management of Pain*. His call for the change in culture of pain management is vital at this present time, especially with the significant changes in the National Health Service (NHS).

Far and away, the best prize that life has to offer
is the chance to work hard at work worth doing.

Theodore Roosevelt

With the changes in the benefit system, many of our patients have complained of

significant difficulties. We have two interesting articles in this issue: Dr Rob Hampton from Leicester details about the *Fit for Work* team, which has achieved significant success in innovating new ways of uniting the health and social sectors. In all, 30 patients on benefits were referred to their team by *Job Centre Plus*, and their results and outcome are impressive. I can see that the pain management programmes have got to adapt with similar innovations if they have to prove to be effective and survive! On a similar note, Linda Knott and her team from South Devon have presented a service evaluation of their pain management service with regard to their ability to meet the patient's need to *return to work* (RTW). A focus group analysis of five patients with RTW needs has clearly shown three common themes: *'negative perceptions', 'knowledge and understanding' and 'problems with the system'*. This once again clarifies the need for the link person with knowledge of chronic pain when facing the RTW issues. We thank them for sharing their ideas and experience, which will definitely help our members.

I am impressed not only at these two articles with regard to 'RTW' issues; also, in an analysis of spinal cord stimulators by Ruth Cowen and her team at Chelsea and Westminster Hospital, they have not only measured the success in terms of pain relief and quality of life but also with regard to their achievement of *RTW* and *going abroad on holidays*. I feel that all future research in chronic pain should have *quality of life* and *RTW* as their primary measurements in addition to pain relief to make the study more meaningful.

Man is the measure of all things:
of things which are, that they are,
and of things which are not, that they are not.

Protagoras, 490–420 BC

Talking about interventions, none can argue with the fact that the future is about measuring the outcomes! Clare Bridgestock and her team from Glasgow have produced an interesting outcome measurement after injection study in this issue. We all agree that it is difficult to measure outcome in many chronic pain interventions due to the multiple variables that could confound the study. We have to appreciate the Glaswegian team for their wonderful analyses of outcomes from 2011 to 2012 with more than 800 questionnaires and nearly 1,400 performed procedures. I am of a firm belief that database of procedures are a vital starting point in outcome measurement after injections or other interventions. More impressive are the results that two out of three obtained 30% reduction in pain and approximately one out of three obtained 60% pain relief; having data to benchmark and compare among ourselves is also vital during this era of revalidation. These teams are not only using these electronic forms for pain injections, but have rolled out to measure outcome in other areas including acupuncture. We wish them all success in their aim to also develop and deliver a clear algorithm based on this database for interventional pain procedures.

I was dismayed by a recent article in the Royal College of Anaesthetists' Bulletin (Burnside WS, Weaver M; Bulletin 81, September 2013, pp. 25–7). The authors surveyed the preference of pain advanced training module among the ST6/ST7 anaesthetic trainees in Northern Deanery. Average rating of interest for pain module was the *least* among all the specialties for advanced training among the anaesthetic trainees in this survey. The rating was only 1.49 in a scale of 1 to 4! Although 53 responded out of 144, it was not encouraging to see that only 2 showed interest in pain module. In another interesting study in this issue of our newsletter, Bence Hajdu and their team have presented a survey among the trainees who attended a cancer study day in their region. Even among this selected group of anaesthetic trainees that attended a pain related study day, the results were not encouraging. Hopefully, new projects, including the e-pain and undergraduate education changes, should encourage and motivate more trainees in pain management.

Thanks to the nurses and Nye Bevan
The NHS is quite like heaven
Provided one confronts the tumour
With a sufficient sense of humour.

JBS Haldane, Geneticist and Evolutionary Biologist (1892–1964)

In my term as the Editor, one of the notable achievements that I wish to claim is that I have encouraged few school students and medical students to write for our newsletter. I have succeeded in publishing a handful of articles in this category in the recent past. Shruthi Rayen, school student from Birmingham has presented her view of how humour can help pain and has written about *Hasya yoga*. Lucy O'Connor from Manchester University has also presented her essay on mind and matter linking pain and disability in this issue.

I am thankful to all the contributors for this issue, to make it such an excellent *Christmas* issue! A variety of interesting articles from various disciplines of pain management – I enjoyed all of them and hope you all will also enjoy them; please write back to us about your views, comments and any other feedback.

I hope that the New Year 2014 brings you all the courage and confidence to face the changes in our health system and helps you to continue working hard for our patients and the specialty. Now, enjoy this issue of our newsletter.

Thanthullu Vasu
Bangor, North Wales

From the President

Dr William Campbell

The British Pain Society

Pain News
11(4) 205–206

SAGE

I thought that this year was going to become quieter regarding activities as the year progressed. My predecessor Professor Richard Langford with support from enthusiastic members of the British Pain Society (BPS) ran commissioning roadshows throughout the country, as well as concluding the current five pain pathways and having these on the Map of Medicine site. In addition, the National Pain Audit has run the planned 3 years now, and the results make fascinating reading at http://www.nationalpainaudit.org/media/files/NationalPainAudit-2012.pdf

The final report confirms the devastating impact that chronic pain has on patients lives and how the provision of adequate pain management can make not only real changes in patients lives but cut health-care expenditure, for example, reduced health-care contacts, including accident and emergency (A&E) attendances. The official launch for this report was held on 29 October in Westminster.

National Pain Audit extension

On behalf of the British Pain Society, Dr Cathy Price, Clinical Lead for the National Pain Audit, applied for an additional pain audit to follow on from the work already undertaken earlier this year, and was successful.

Currently, we are not sure how many years this project will run for, but it is for at least a couple more, after a 10- to 12-month gap. This great news will allow for more detailed outcome measures and analysis, strengthening the case for adequate funding for pain management throughout the country. Currently, the provision of services is patchy.

The British Pain Society Website

Over the past couple of years, there were plans to improve the BPS website. We are nearly at a point where we will see useful changes. Dr John Goddard has now taken a lead on this project, following on from Dr Rajesh Munglani who has established many new changes that will be needed. We would hope that in the near future, information on commissioning can be added, and together with the Pain Pathways and results of the Nation Pain Audit should prove to be a very valuable and readily accessible resource.

e-Learning pain

I have written a little about this project, which was accepted as a joint venture by the BPS and Faculty of Pain Medicine Royal College of Anaesthetists, later in this issue. The submission was accepted and funded by the Department of Health e-Learning Programme, and after the hard work of the module leaders and authors, this system, which is intended for all health-care professionals, should become live towards the end of this year.

National Institute for Health and Care Excellence

Currently, we are in the process of applying for National Institute for Health and Care Excellence (NICE) accreditation of our publications. We will not know the result of this application until next spring at the earliest. Dr Eloise Carr and more recently Professor Nick Allcock established a detailed process which should be followed in preparing any BPS publication for our members or patients. This has put us in a good position for this application, but we will have to wait and see how NICE views it.

Low back pain

During this autumn, there have been several meetings on the management of low back pain (LBP). One has been led by Professor Charles Greenough, National Clinic Director – Spinal Disorders, Chair Pathfinder Project – Low Back Pain and Sciatica. He is attempting to produce an agreed flowchart between the health-care disciplines and their representative bodies. This takes into account the

pathways produced by the BPS (which were drawn up by a multidisciplinary group in any case) and pathways produced by other professional organisations. It is hoped that there will be an agreed flowchart for back pain patients available by the end of the current year and that this will be acceptable until there is a replacement for the NICE LBP guidance CG88.

On 3 October, NICE asked stakeholders to a scoping meeting on LBP. Professor Mark Baker, Director, Centre for Clinical Practice, NICE, chaired the meeting, and Dr Stephen Ward is to lead the project. A workshop took place during the morning to establish which disciplines would be best placed to act as representatives on the clinical guidance group and to evaluate therapies that might be added to the pre-populated list that was produced on the day. It was emphasised that it would be 24 months from now, give or take a couple of months, before guidance would be published to replace CG88.

New Editor for Pain News

Dr Thanthullu Vasu has made considerable and valuable changes to *Pain News* since he started as its editor a few years back. He will be leaving as editor next spring and to ensure that we have ongoing support for this activity, an advertisement for not only an Editor but two Associate Editors was made recently.

I am pleased to say that there was a very good response to this and that Dr Arasu Rayen has agreed to take over from Vasu after a period of shadow work for several months. We also had a number of applicants for Associate Editor, representing medical, psychology, nursing and physiotherapy disciplines.

Rest assured that we will make full use of your talents!

Vasu it is testament to your sterling work that we need several people to replace you.

The Secretariat

Dina Almuli stepped in to replace Rikke Susgaard-Vigon during her maternity leave. Dina has done a great job co-ordinating features for the forthcoming Annual Scientific Meeting (ASM), including changes to the way the ASM is run, following members' constructive feedback.

Good news, Rikke had a little baby boy Noah Soren on 26 August – mum and baby both keeping very well.

With the increasing number of projects, as well as the ongoing work for the ASM, SIGs, and so on, the Secretariat is under considerable pressure. We are all very grateful for that extra bit that they do for the BPS. We plan to have a strategy day after the next council meeting in early December to see how we can improve the running of the Society.

Consultations

Throughout the year, the Society is invited to participate in various consultations relating to pain; in addition to the numerous requests from NICE, the Society has also submitted comments to the following consultations since September 2013;

- Regulations about the new offence of driving with a controlled drug in the body above a specified limit: consultation document (Department for Transport) – submitted 17th September 2013
- D15 Major Trauma Clinical Reference Group stakeholder product testing consultation (CRG) – submitted 30th September 2013.
- Scheduling of tramadol under the Misuse of Drugs Regulations 2001 (Home Office) – submitted 9th October
- Spinal Cord Injury Product Testing consultation (CRG) – submitted 11th October 2013.
- MLX 382 – Consultation on availability of Diclofenac as a pharmacy medicine (MHRA) – submitted 21st October 2013
- Paediatric Cancer User Friendly Service Specification consultation (CRG) – submitted 21st October 2013.
- Provision of specialist residential chronic pain services in Scotland consultation (Scottish Government) – submitted 27th October 2013.

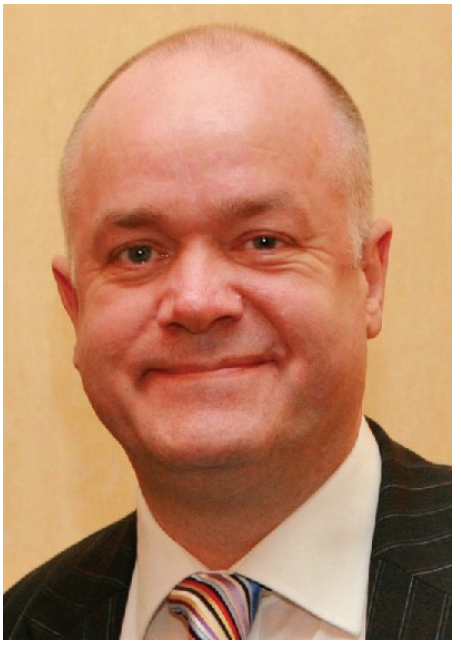
From the Honorary Secretary

Dr Martin Johnson

The British Pain Society

Pain News
11(4) 207

SAGE



Having spent the last few days marveling at the architectural wonders of Florence (another EFIC over), I am now sat in the plastic bucket seats of a well known low cost airline – tickets cheap but you pay for everything else – they haven't yet started to charge for the oxygen, yet…..

So with a gin and tonic in my hand I am seeking inspiration for this column!

My eyes are drawn to a headline on the flight magazine – which is the biggest phobia in the world (affecting businesses)? Apparently it is something called Nomophobia (my spell checker does a cartwheel….). This is the fear of being without a mobile phone. I am not sure exactly how this affects businesses but I agree it certainly affects the individual. Do we see chronic neck pain more because a vast amount of our time we have our heads bent down looking at screens?

Membership

Jenny kindly provided me with the latest membership figures at the Council meeting a couple of weeks ago - the figure is exactly the same as when I last reported it, standing at a total membership of 1391 (with only very slight changes in the membership breakdown). We did ratify a large list of new members at Council which will need to be added – it was interesting that there was only one new Consultant Anaesthetist (and two trainees) but three new GP members, four psychologists, two occupational therapists, two physiotherapists and several other professions! Our multiprofessional nature is our single biggest strength. Welcome to new members!

Study Days

Firstly, though I appreciate it wasn't a study day, may I give my congratulations to the organisers of the PMP Conference in Jersey – by all accounts another outstanding event.

In 2014 we have several interesting–Cancer Pain, Oral Facial Pain (in recognition of the IASP theme of the year), Musculoskeletal Pain. Exact details will be available either in this edition or later in the year. Please support these events.

The Primary & Community Pain SIG are planning their own study day on the 17th January 2014 – the agenda looks extremely informative and entertaining!

Commissioning

The commissioning support document will hopefully have been finalised before the latest *Pain News* is published. I hope to report on this long awaited document in the next edition of *Pain News*.

A Challenge!

I have recently written an editorial for Paineurope but unfortunately this journal is not distributed in the UK so I thought I would finish this column with an abbreviated version of my challenge!

Initially I set the scene about the increasing pain burden (which we are all familiar with) then I went on to to say the following.

It is my belief that chronic pain is the one of biggest long term health problems in western society (along with hypertension, depression and obesity). To deal with it we have one of the smallest groups of dedicated healthcare professionals (compared with other medical disciplines) and also generalists are poorly trained in pain. Thus focusing only on high level interventions simply will not work, both practically and financially. I come across so many healthcare professionals that say that self management is very woolly and not real medicine. I would contend that this is simply because they don't know what information to give the patients and in particular, how to support them. Unfortunately I also come across many patients that have not been given any self management advise and indeed their clinic letters also do not change this view. Self management works[1] and improves health outcomes, physical functioning and patient experience. But this will only happen if YOU believe in it.

May I set a challenge? Whatever your occupation within pain, at every grade, if you don't know about supported self management – find out and then try it on the next patient you see. Or at least give them a copy of the Pain ToolKit[2]!

As quoted in a NHS publication about self help[3] (written in part by a pain specialist):

"The role of a doctor is to add life to days, not days to life"

Notes

1. http://www.kingsfund.org.uk/projects/gp-commissioning/ten-priorities-for-commissioners/self-management - last accessed 03/09/2013 (Challis et al 2010)
2. http://www.paintoolkit.org
3. Promoting Optimal Self Care Dorset and Somerset Strategic Authority. 2006.

Vital topic

Can we change the culture of pain management?

The British Pain Society

Pain News
11(4) 208–211

SAGE

Prof Dr John D Loeser

jdloeser@u.washington.edu

Dr John D Loeser is Professor Emeritus of Neurological Surgery and Anesthesiology and Pain Medicine and was the Director of the Multidisciplinary Pain Centre at the University of Washington from 1983 to 1997. He is the Past President of the American Pain Society and the International Association for the Study of Pain. He was the Assistant Dean for Curriculum at the University of Washington from 1977 to 1982. He is the editor of Bonica's 'The Management of Pain' and has lectured and written extensively on both research and clinical aspects of pain. The following is a transcript of his main lecture at the Philosophy and Ethics SIG meeting at Launde Abbey, June 2013.

The United States and the United Kingdom have very different health-care systems. Many of the issues that I will address may be more prominent and problematic in my country than in yours. But my travels have told me that the same issues come up in every country I have been in; it's just the relative proportion of which issue is the big one that changes.

Culture

Is there a culture of pain management? Or are there several cultures? Or is it just chaos with no culture behind it where everybody has their own viewpoint? There are at least ten Pain Societies in the United States, many with state- or region-based chapters. Each one promulgates guidelines, has meetings to present their products and often threatens litigation against people who say or do things that threaten their interests. You can tell what a pain specialist does for a living from the organisation he or she belongs to. I'm sure in the United Kingdom, you have something similar. I am aware of the revolution you had in the Pain Society because of the President's agreement to standards of care that did not meet the desires of many of its members. If you look at the guidelines, you can immediately tell who wrote them, and too many patients get what the provider does irrespective of what the patient needs. There are pain clinics in the United States where 100% of the patients get an injection or a surgical procedure without a history taken or a physical examination. Part of the chaos and lack of a common culture in our country is that there is no standard of what should be done before surgery or treatment is implemented. We have different organisations promulgating directly opposing the guidelines and each provider (mainly private insurers) deciding what they are going to pay for.

So, why the chaos? The first problem is that many people have wrong conceptual models. There are many physicians who are fixated on a biomedical model of disease and just cannot conceive of the issue that something outside of a patient's back may be responsible for their pain behaviour. Everybody knows the highly mechanistic Descartes model of the body and the fire. That was a pretty good model for its time, but the Melzack and Wall Gate hypothesis in 1965 totally revolutionised the way physicians thought about pain and was a seminal act in leading to the development of a pain world.

Second, we lack outcomes data. You are lucky if you can find data for a few months, but a year's follow-up, which is reasonable for a chronic pain patient, is ridiculously rare. Without outcome data, you don't have feedback on what your interventions do; so, you keep doing the wrong thing over and over again. Meaningful outcomes data must involve follow-up of at least 6 months to a year or even longer, and include self-reported pain, functional improvement and health-care utilisation, especially with regard to medication, work status and quality-of-life assessment.

In the United States, physicians are pressured by the need to fund their practice or the institution in which they practice to work in unsatisfactory ways. They are pushed into seeing more patients per day and more per hour; so, they don't have time to listen, and they fail to pick up on the patient narrative and the meaning of life – and their pain – for the patient.

Then, there are patient expectations. I can't tell you how many patients who have said to me *'I came here because I hear you do laser treatments'*; I say *'for what?'* and they reply *'I don't care what it's for – I just want the laser treatment'*!

The role of opioids in chronic pain management has become a major issue, and we have a new epidemic of inappropriate opioid use and diversion. There are more deaths in the United States from prescription opioids than from heroin, and more than that are killed on our highways every year. About a third to a half of the deaths are in the person for whom the prescription was written, and a similar proportion in a person for whom it was *not* written, commonly a teenager taking his mother's pills to a party.

Is pain a medical problem?

People use the word 'pain' to mean many different things, including suffering. Suffering is certainly not always a medical problem, and for many of our patients, pain is not really a medical problem and doesn't require some sort of medical intervention, although it may demand some kind of social intervention. Pain was regarded only as a by-product of disease until before John Bonica. If you look at medical textbooks prior to 1950, you will never find one that has a chapter or a section on pain. Bonica's book *The Management of Pain* published in 1953 was the first literature in the English or any other language on pain. Just as the Melzack and Wall hypothesis revolutionised thinking about the basis for pain and strategies for its management, Bonica's push to establish

pain as a medical problem in its own right was revolutionary.

The need for pain

Why do people have pain? Why have we evolved as a species with the ability to perceive pain? There have been teleological explanations: it's good, it protects us from things. There have been social and moral explanations: the word comes from the Latin *Poena* meaning punishment. In the Dark Ages, the prevalent thought was that sin led to pain and suffering, and that people were born evil and somehow needed pain and suffering to make them worthy. Some people deliberately endured pain and suffering to somehow make themselves better as human beings. The Renaissance changed things, and people were generally thought of as born good and not in need of pain to make them better. There was an attempt to abolish pain and suffering in the 19th century through the development of social organisations and welfare programmes. But in the modern era of the 20th and 21st centuries, we see biomedicine promising the abolition of pain – a drug that will guarantee you pain relief.

Medicine – perhaps more in the United States than the United Kingdom – has essentially ignored human suffering. We have seen progressive limitation of the social resources to deal with it. There are many people who still utilise ancient, Mediaeval or Renaissance concepts and values. Unfortunately, providers and funders of health care are not immune to these archaic ways of thinking.

Unmyelinated axons and damage-sensitive receptors exist in every animal from the sponges up, but the relevance to human suffering of the teleological explanation that pain allows an organism to avoid tissue damage by triggering protective and adaptive reflexes might be called into question by a fascinating story about angina. This was totally relieved by bilateral thoracic sympathectomies, which were the most common neurosurgical operation done in the first half of the 20th century. It was argued that if the person doesn't feel the angina, they won't know that they had better stop exercising or they'll kill themselves, although there was oodles of evidence already that not perceiving ischaemia did not change your outcome one iota. In the modern era, spinal cord stimulation in the thoracic region for a patient with angina is an excellent method of controlling it, and exactly the same objections have been raised, although people with and without stimulators die at exactly the same rate.

Does suffering have social uses? Perhaps by manifesting it, you enlist the help of others. It is also suggested that unless you feel pain yourself, you will not have the ability to empathise with someone else in pain, and empathy is part of the glue of society. There are some who believe that somehow it is good for people to suffer, as this makes us better human beings, and that children should be allowed to suffer a little. Can suffering be used to allow social controls and teach moral behaviour?

C.S. Lewis wrote in the preface to *The Problem of Pain* that *'all arguments in justification of suffering provoke bitter resentment against the author'*. His suggestion that without pain and suffering people would forget their God stirred much debate.

Although suffering has many causes other than pain, including, fear, anxiety,

isolation, depression, hunger, fatigue and loss of loved objects, we continue to use the language of pain for all kinds of suffering. When people use the language of pain and when they speak of suffering, it tells you how they perceive the world around them.

Suffering is not presented uniquely to health-care providers. Taxi drivers will tell you they hear a lot of suffering from their passengers, as do attorneys, bureaucrats, social workers and of course spouses. But physicians tend to ignore suffering, perhaps because of the biomedical model, and perhaps because they don't want to ask. There are loose linkages between tissue damage, pain, suffering, pain behaviours and the patient's narrative – what he says and does – and these need to be investigated.

Capitalism and care

There is unequal remuneration by providers. I, as a surgeon, can generate more revenue in 1 hour in the operating room than I can in 8 hours in the pain clinic seeing patients with chronic pain. We therefore have a surplus of people who do procedures and a dramatic shortage of primary care physicians who should be the first step in any pain patient's evaluation and treatment.

We have to face the reality of capitalism: that money motivates behaviour. How and what physicians are paid strongly influences what services they provide. Money always trumps ethics. In our country, the insurance industry will not pay for multidisciplinary pain management, even though it is known to be the most cost-effective treatment available. The quality of care declines when more business pervades medicine. It is not just the spectacularly bad actors who make the headlines; it is the everyday practice of medicine that has been subverted by the business model. The control of medical practice by market economics is not compatible with an ethically based profession of medicine.

George Bernard Shaw saw this clearly:

> *That any sane nation, having observed that you could provide for the supply of bread by giving bakers a pecuniary interest in baking for you should go on to give a surgeon a pecuniary interest in cutting off your leg, is enough to make one despair for political humanity.*
>
> *Preface, The Doctor's Dilemma: A Tragedy.*

This was written 120 years ago.

My belief is that the focus of the provider must be on the care of the patient. Conflicts of interest are worldwide and exist in every health-care system today. 'Patients' have become 'consumers'. 'Doctors' have become 'providers'. 'Clinical judgment' has been replaced by 'evidence-based practice'. The traditional focus on humanism and caring has been threatened by the business aspects. The treatment of pain is based on the highest ethical principles in medicine; it should not be impaired by transient regulations, fears of retaliation or economic factors.

Efforts to reform health care have been undermined by the public's ambivalence towards the government and by a dichotomy between the perceived overall system performance and personal care experiences. A survey published in the *New England Journal of Medicine* a few years ago of the public viewpoint of personal experience versus performance revealed that although coverage and quality of the system were seen to be poor and costs too high, there was much less dissatisfaction with personal experience; respondents thought it was worse for other people. It's a very interesting paradox.

No one argues that the United States has a good health-care system, but how to change it is hotly debated. To some degree, we have placed the burden of good health on the doctor and not the patient. We have people smoking who don't feel they have adequate care for their chronic lung disease. Health care has been driven much more by incomes than by outcomes. We have what is called re-imbursement-driven medicine; in other words, what gets done by the doctor is what gets paid for.

Conclusion

So, how can we change the culture of pain management? First, we will need to select different health-care providers. You don't want surgeons or anaesthesiologists to be the front line. Second, in a capitalist society, you need to use capitalist principles to reward desired behaviour. One third of the American health-care budget is spent on administrative costs. We have to eliminate the intermediaries who wish to change health care into a business. Third, we must evaluate functional status, not just self-report of pain, and only then will we learn what treatments work.

Part of the problem in our country at least is that we pick the wrong people to be doctors. We select physicians based on their ability to take tests, rather than their narrative sensibilities. Another problem is the overwhelming amount of debt that the medical students accrue by the time they

graduate, which forces them to choose the more remunerative specialities to pay off their debts.

We have to improve remuneration for primary care physicians to get more people to do that, and most pain management should be done at the primary care level. Pain specialists should be generalists, not proceduralists, and referral from a pain generalist should be required to see a procedural specialist. Nobody should walk into a pain clinic and get a block a half hour later. Chronic pain management is a primary care function, and procedural specialists should not be the entry point for care.

But perhaps, above all, we need to change pain education. Pain must be introduced into the basic professional curriculum for all health sciences. I am happy to say that there appears to be currently a revolution in American medical schools to make pain part of the curriculum.

GLOBAL YEAR AGAINST

OROFACIAL PAIN

OCTOBER 2013 – OCTOBER 2014

International Association for the Study of Pain

News

Update from Acute Pain SIG – Chest(er) pain

The British Pain Society

Pain News
11(4) 212–213

SAGE

Dr Jane Quinlan *Chair of the Acute Pain SIG*

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This year marked the 23rd year of the National Acute Pain Symposium currently held, as for the last few years, in beautiful Chester. The meeting is skilfully organised by Keith Stevens and his glamorous assistant Georgina Hall, and had the usual high standard of speakers and variety of topics that maintains its high repute.

While some see or consider acute pain as less of a focus, this meeting with over 200 enthusiastic attendees highlights that in-hospital pain management is not only thriving but developing to meet the changing needs of an increasingly complex patient population.

One of the recurring themes this year was the overlap between acute and chronic pain. Mark Rockett from Plymouth and Richard Langford from London discussed the transition of acute post-operative pain to a chronic pain state, while Christine Sinclair from South Tees told us of the community-based rapid access clinic they have set up for patients with an acute exacerbation of chronic pain presenting to the emergency department. Rather than admit the patient to an acute hospital bed, the patient is reviewed in the emergency department and given an appointment for the community clinic. This has decreased repeated hospital admissions and provides much more appropriate care for patients than a prolonged hospital stay. The audience agreed that, with reduced out-of-hours general practitioner (GP) availability and reduced community support generally, emergency hospital admissions for patients with chronic pain are becoming more common, with the crisis precipitant often being social factors rather than an acute medical event. Inpatient pain teams are therefore developing skills in managing long-term conditions, and working with GP and community teams to support pain patients at home.

Mark Rockett also focussed on the importance of good communication with GPs when he highlighted the risks of prolonged opioid use in patients prescribed opioids for short-term acute post-operative pain but who continue to take them well beyond the period of tissue healing. An American study found that 6% of patients were still taking opioids 6 months after they had been started for post-operative pain.[1] Pain severity or duration did not predict prolonged opioid use. With the known risks associated with long-term opioid use, we must ensure that patients and GPs understand the importance of stopping strong analgesia once the acute pain resolves.

The Thursday morning talks ranged from our youngest patients to our eldest: Rishi Diwan from Alder Hey gave a fantastic talk on paediatric pain management and touched on the current controversy over codeine and the surprisingly broad decision of the European Medicines Agency to restrict its use to children over 12 years of age.[2–4]

At the other extreme, Euan Shearer from Aintree gave an excellent overview of pain issues in obese patients, including the interrelation of obesity causing pain, and chronic pain and inactivity resulting in obesity. He mentioned the difficulty of providing acute analgesia to patients after bariatric surgery where doses cannot be based on actual body weight, but he recommends ideal body weight (IBW) plus 40% (IBW = height in centimetres minus 100 for men or 105 for women, to give the IBW in kilograms).

Jeremy Cashman from London continued the pharmacology theme and examined the use of adjuvants to enhance pain relief, while Carmen Lacasia-Purroy from Aintree presented her experience of bridging the analgesic gap between the cessation of epidural analgesia and the start of oral step-down by using fentanyl patches. Anton Krige from Blackburn considered whether epidurals still have a role after colonic surgery or whether they have been superseded by the plethora of abdominal wall blocks. He concluded that laparoscopic techniques mean that abdominal wall blocks are usually sufficient but that epidurals still have a role in more complex open procedures or for patients with a chronic pain history.

In keeping with the indistinct territories of acute and chronic pain, we had a light-hearted and lively debate as to whether chronic pain specialists or anaesthetists are best suited to treat inpatient pain. With impressive impartiality, I feel that, on balance, I won, arguing that anaesthetists had the necessary skills (impatience mainly) to manage the challenges of inpatient pain, and that a robust understanding of the physiology and pharmacology of acute illness were more important than

knowing the diagnostic criteria for complex regional pain syndrome. Mark Rockett's defence of chronic pain specialists was noble, but undermined slightly by his admission of defeat at the outset. The resultant audience discussion was enthusiastic and came to the rather more realistic conclusion that a specific interest in inpatient pain was more important than a clinician's background; so everyone's a winner.

Dr Andrew Moore broke the land speed record to arrive in time to deliver an excellent talk on the effect of the formulation of analgesics, whereby fast-acting preparations may not just be marketing hype but seem to exert a significant positive influence on the effectiveness of the drug.

We were extremely lucky to have two young researchers, Anushka Soni from Oxford, and Franziska Denk from King's speaking on the role of quantitative sensory testing (QST) in assessing musculoskeletal pain and the genetics of pain, respectively. This meeting provides an ideal forum for basic science researchers to educate and interact with clinicians in an informal setting.

A business meeting of the Acute Pain Special Interest Group (APSIG) was held on the final afternoon. Topics discussed included the development of the APSIG website to include more links to useful resources, the production of a patient leaflet to support patients in managing their pain at home after discharge from hospital (we have the British Pain Society (BPS)) support and are putting together a multidisciplinary group to lead its development), the initiation of a research and audit database for APSIG members to collaborate and allow multicentre working (Mark Rockett is research and audit lead for APSIG and can be contacted at mark.rockett@nhs.net) and the possibility of developing an acute pain app.

Thank you to all those who attended and made it such a great meeting. I look forward to seeing you all next year. Special thanks to Andy Vickers, Richard Langford, Jennie Hunter and Martin Leuwer who are all valued and staunch supporters of the National Acute Pain Symposium.

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News

PMP SIG – rehabilitation: moving forward with confidence

The British Pain Society

Pain News
11(4) 214–217

SAGE

Dr Paul Wilkinson

Almost two years have passed since I was appointed as the Chair of the Pain Management Programme Special Interest Group (PMP SIG), and as we approach the twilight of the current committee's time in office, it seems a good time to reflect on the work of the committee and pain management in general. I have to say that I have thoroughly enjoyed my time on the committee and feel privileged to be part of such a resilient, hard-working, energetic and innovative team. Sarah Wilson, Dee Burrows and Kerry Mathews have been astonishing in their hard work and dedication, supported by our wider committee members.

Immediately, I must thank all those who attended, facilitated, lectured and organised our recent SIG conference in Jersey at the 'Hotel de France' on 26 and 27 September 2013. The conference was magnificent, a true 'tour de force', but more of this later!

I will start with the business of the PMP SIG. In a climate of unprecedented political change in health care, there is a sense of anxiety by many. The challenge in the rehabilitation of people with pain is common to pain care in general. In a health-care system of infinite demand and finite resource, without due diligence, there is a danger that the allocation of health-care resource is most influenced by crisis rather than coherent planning. A long queue in accident and emergency, a late diagnosis of cancer, an intensive care patient without a bed – all grab the public like a vice. Managers are held to account and remain in the spotlight until there is resolution. We all know that there are equal injustices in the area of pain but that people with pain often suffer in silence, the lobby is quieter and the arguments we all know well for the effective treatment of persistent pain are unequivocal but often complex.

The PMP SIG is fully aware of these difficulties and has been working tirelessly on your behalf. The document *Recommended Guidelines for Pain management for Adults* and the accompanying participant document has been radically updated. This is now an evidence-based document with each statement supported by an evidence rating. The role of individual programmes of care is acknowledged as well as the importance of 'back-to-work' strategies. Self-management is a therapeutic approach that begins with the first health-care contact throughout the care pathway to the refractory group who attend an interdisciplinary programme. Different levels of risk-stratified early intervention are followed by group-based pain management programmes or intensive (often residential) programmes where needed. Coupled to other British Pain Society (BPS) documents like the Map of Medicine, there is now very significant support to help practitioners manage negotiations with commissioners. My aim here is to notify you of the existence of these documents which will undergo a formal launch separately. I wish to thank deeply the working group on this document; this group strived to get the balance right for appropriate, not contrived consensus.

We now have a completed update of the Directory of PMP teams throughout the

Table 1. Key achievements and future planning

1. **PMP Directory Completed**
   Updated the National Directory to be updated regularly in the future
2. **PMP Guidelines Completed**
   The SIG will formulate a launch, implementation, dissemination and review policy in due course which is posted on the web site
3. **ASM SIG Joint Workshop**
   Submitted and gained acceptance for a joint workshop with the Interventional Pain Medicine SIG for the next AGM in 2014
4. **HRG Coding – Update**
   We have encouraged members to use the HRG coding system but have shared concerns that the current codes may not generate enough income to support PMPs especially if doctors are included. In addition, many services are commissioned directly so using the codes centrally to measure activity will lead to significant underestimation
5. **PMP Conference Guidance**
   Refined our process of support for this conference from the SIG committee to produce a guide and procedure for local organisers
6. **Role of committee officers + committee communication**
   Formally defined the roles of the SIG officers and duration to improve succession planning
7. **Newsletter**
   Initiated a brief Newsletter to improve communication with membership
8. **E-Learning**
   Coordinating rehabilitative components of the Department of Health E-Learning project

PMP: Pain Management Programme; SIG: Special Interest Group; AGM: annual general meeting; HRG: Healthcare Resource Group.

United Kingdom. Thanks to Suzie Williams and all who assisted her. Teams have committed to using the evidence-based document within this process. While variation in interventions for people with pain is highly desirable, based on individual need and local demographics, variation in practice can weaken negotiation for resources. The PMP SIG is confident that there will be more unity in our approach to self-management in the future and a clear path has been set. We know we have not captured everyone in the Directory. If your programme is missing, can you inform the BPS Secretariat as we hope to update this more frequently.

In this account, I have so far discussed Pain Management but not wider pain treatments. PMPs are an integral part of interdisciplinary care. It is imperative that we put equal energy into integrating different types of treatment into coherent treatment plans. Can we say that this always happens, all the time, everywhere? Within our interdisciplinary teams, can we say that we always understand the perspectives of others? Do all members of pain teams have a complete working knowledge of all interventions? At the next British Pain Society Meeting, we will be having the first Joint Workshop between the Interventional Pain Medicine SIG and the PMP SIG. Judging by one or two communications, a few were highly surprised, but all have universally welcomed this! Clearly, only one small area can be covered, but the aim of this workshop is to integrate and coordinate our thinking. If you answered 'yes' to all of the previous questions, then there is clearly no need for you to attend! However, I would challenge you to reflect further! I would like to thank Manohar Sharma from the Interventional Pain Medicine SIG and Kerry Mathews for pulling this together.

I have summarised the key recent achievements of the SIG in Table 1. Behind the headline news, there is much more. We have a Newsletter for

Table 2. Committee members.

Main Medical	Dr Paul Wilkinson (Chair)
Alternate Medical	Dr David Laird
Past Chair	Dr Frances Cole
Main Psychology	Dr Kerry Mathews (Secretary)
Alternate Psychology	Dr Zoe Malpus
Main Nursing	Dr Dee Burrows
Alternate Nursing	Joanne Hurt
Main Physiotherapist	Sarah Wilson (Treasurer)
Alternate Physiotherapist	Despina Karagyri
Main Occupational Therapist	Deanne Barrow
Alternate Occupational Therapist	TBA
Link to Council	Heather Cameron
Patient Liaison	Colin Preece

From left to right: rare animals at the Gerard Durrell wildlife centre – Dr Paul Wilkinson, Dr Mick Thacker, Professor Lorimer Moseley and Dr Iain Jones

Greve de Lecq

Speakers and organising team

SIG members and have strengthened guidance to PMP SIG conference organisers for what is now a large-scale conference, and we have strengthened our approach to succession planning within the SIG. We have recently contributed to the relevant pain management sections of the E-Learning on the Department of Health (DOH), a crucial joint BPS and faculty project. But alas, there is still so much more to do!

Now over to the Jersey conference and more fun things! The PMP SIG holds this two-day conference on topical issues every two years, but this is the first time that this conference has been held off the mainland. I believe that there could have been no better venue than this beautiful Channel Island and thank the Jersey local committee for their enormous efforts in hosting such a conference and for overcoming many logistical issues along the way). The group worked tirelessly and imaginatively to ensure the economic viability of the conference in what is clearly an increasingly difficult financial climate. I must specifically mention Alessio Agostinis, Julia Morris, Rosy O'Doherty, our event manager Sara Clews and all the support from the BPS Secretariat. I also wish to thank the committee members who supported this process and the many contributors and partners both in industry and locally as well as Dee Burrows, and Sarah Wilson (Table 2). The Jersey team assembled a formidable list of speakers and developed themes that are crucial to the challenges of everyday practice. It is rare for such national and international speakers to be assembled in the pain management field.

Our invited international speakers, Professor Lorimer Moseley from Australia and Professor Mick Sullivan form Canada gave riveting talks as did all our speakers local to home. Important themes were participant-centred outcomes, evidence-based consultation, perceived injustice,

mindfulness, activity management and the role of the immune system.

We were supported financially and logistically by Jersey Employer's Network on Disability (JEND) and the Jersey Conference Board. They secured considerable media coverage (radio and TV), and the opening speeches were by the deputy High Minister and the Minister for Health! We got a real Jersey welcome! Finally, I leave you with the lingering memories of Jersey Island captured here mainly by my good friend and colleague Sailesh Mishra. I concede that despite my best efforts, he has much more talent them me in this area and a better camera!

e-Learning in pain

Dr William Campbell

In September 2009 an application for a multidisciplinary e-learning programme in pain was made to the Department of Health e-Learning for Healthcare programme (2010-2011). Ann Taylor led on this for the British Pain Society. The Faculty of Pain Medicine joined in the application, which was successful, having both a Royal College and a multidisciplinary Society behind it.

The programme was not intended for the pain specialist but rather all healthcare professionals so that they could recognise unrelieved acute and chronic pain. In addition the appropriate staff could then assess and manage the pain in a safe and effective manner using current best practice. As I mentioned in the last issue of *Pain News*, we are indebted to Julia Moore, National Director of e-LfH who chaired the regular meetings and of course the module leaders, who drove this project. There were many authors covering the resulting modules:

- Basic pain management
- Basic science
- Treatments (pharmacological and non-pharmacological)
- Acute pain
- Musculoskeletal pain
- Neuropathic pain
- Other chronic pain
- Special populations
- Cancer pain

The authors, too many to mention here, devoted many hours to writing each section and without their dedication this work could not have been completed. To all of the authors we extend a big thank you.

In total there are 72 sessions, of these 15 are existing e-LA sessions.

Although I mentioned that these modules are aimed at the non-specialist in pain medicine, they are so comprehensive that they make a good primer for any clinician starting out in their training in acute, chronic or cancer pain!

The actual programme will be available at the end of this year / early next year, but the launch date is the 3rd December 2013 at the Royal College of Anaesthetists, Churchill House, London, by invitation.

News

Pain relief in Uganda

Dr Barbara Duncan

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The British Pain Society

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SAGE

After retiring from the National Health Service (NHS) last year, I found myself working as a volunteer doctor for Hospice Africa Uganda (HAU), where I met some inspirational people.

Anne Merriman

Professor Anne Merriman grew up in Liverpool. When she was 13, she saw a film about medical missionaries working in Africa and knew that is what she wanted to do. On leaving school, she joined the Medical Missionaries of Mary (MMMs), and as a nun ran a medical laboratory in their hospital in Ireland. Then MMMs arranged for Anne to train as a doctor at University College, Dublin. She worked as a missionary doctor in South East Nigeria for 9 years returning to the United Kingdom to look after her mother. Anne focused on Geriatric Medicine becoming Consultant and Head of Geriatric Medicine at Whiston Hospital where she revived a failing service. She realised the great need for care of the dying elderly, began teaching about this and set up a palliative care team.

After her mother's death in 1982, Anne worked in Malaysia as Associate Professor in Penang and Senior Teaching Fellow in Singapore. She became aware of the ethical issues of discharging patients home with incurable illnesses and no treatment or no pain relief. Anne set up a volunteer service in Singapore, which became the main Home Care Service providing pain relief and holistic care.

In 1990, Anne was invited to become Medical Director of Nairobi Hospice in Kenya. She witnessed terrible suffering of patients presenting with advanced cancer. Many could not reach radiotherapy or oncology services. Dame Cicely Saunders, Anne's inspirational force, asked her to write about African palliative care. Subsequently, a number of African countries invited her to develop palliative care services. After a feasibility study to find a suitable African country, Anne and her small team, founded HAU in 1993. The purpose was to develop a sub-Saharan African model of palliative care that is affordable, accessible and culturally acceptable. In its 20 years of existence, HAU has cared for 21,818 people. Provision of strong analgesics is crucial. One of the main tasks in African countries is to work with governments to change legislation allowing morphine into their countries, educating health-care workers to prescribe and administer morphine safely, and producing inexpensive oral solutions of morphine for patients to self-administer. Anne, ably supported by colleagues such as Dr Jagwe (a Ugandan senior physician), worked tirelessly in advocating palliative care and the provision of morphine for pain relief in sub-Saharan countries. In 2003, Anne was awarded a MBE for her work on relief of pain throughout the world.

Education is a major role for HAU in expanding palliative care and pain relief throughout sub-Saharan Africa. In 2009, the Institute for Hospice and Palliative Care (IHPCA) was accredited by the National Council for Higher Education in Uganda as an institute of Higher Learning. IHPCA, developed from the education department of HAU, provides short and long courses for a wide range of health-care professionals, including a degree course in palliative care. Changing of legal statutes to allow nurses to prescribe morphine, followed by training nurse prescribers, was a major step for HAU in providing accessible pain relief. Nurse-led palliative care is the foundation of African palliative care due to the shortage of doctors.

HAU sowed the seeds for the Palliative Care Association of Uganda (PCAU; in 1999), the Makerere Palliative Care Unit (MPCU; in 2008) and was one of the founding members of the African Palliative Care Association (APCA). These organisations are working together to reach the common aim of palliative care for all in need in Africa.

At 78 years of age, Anne now focuses on HAU's International Programmes visiting many countries each year. Last year, she visited Cameroon, Ethiopia, Nigeria, Sierra Leone, Congo Brazzaville,

Congo Kinshasa, Cote d'Ivoire and Malawi. Although Anne is no longer a member of the MMMs, sensitivity to the spiritual needs of patients and their families, regardless of their faith or beliefs, is an abiding passion. Anne firmly believes that this means 'being present' for every individual while stripped of the professional persona. Being there simply as one human being caring for another.

In 2011, Anne Merriman and Julia Downing were appointed Professors in Palliative Care at Makerere University.

Julia Downing

Professor Julia Downing had always wanted to train as a nurse at Guy's Hospital. Guy's suggested she should do a degree course that they couldn't offer. She gained her degree in nursing at Cardiff where she was lucky enough to experience two student electives that have influenced her career. The first was at St Christopher's Hospice, a choice that was made after witnessing a dying patient being shunted into a side ward and then simply left there. Julia found this distressing. No one actually knew what to do for someone they couldn't cure. A friend of hers died in St Christopher's and that experience was a stark contrast. Her second elective in a mission hospital in Zambia taught her that experience was needed before even thinking about working or teaching overseas. Julia knew she wanted to return to Africa sometime.

After completing training, Julia worked on the oncology ward at Hammersmith Hospital and in time became a Lecturer at the Royal Marsden Hospital. On researching an article about nurse consultants, she came face to face with an advert for a post at the Mildmay Centre in Kampala. Mildmay was set up in 1998 to provide quality HIV/AIDS care, treatment, training and education. This job had her name on it, everything fell into place, and she felt this was her calling. Her Christian faith is at the core of her being, and listening to God's desire for her is a driving force in her life. So, in 2001, Julia moved to Kampala and set up the education and training centre at Mildmay. At this time, there was limited antiretroviral (ARV) treatment available for HIV/AIDS, and adults and children were dying daily. This was a difficult time for everyone involved with caring for people with HIV/AIDS. This has changed with the advent of generic ARVs.

One of her passions is paediatric palliative care, originally stimulated by becoming link nurse for adolescents as an oncology nurse at Hammersmith. She is involved with the International Children's Palliative Care Network (ICPCN) and has developed e-learning programmes on pain assessment and management for children. Julia has also worked in Serbia for the last 2½ years after being invited by the Serbian Government to train staff and capacity build palliative care services throughout the country.

Julia's personal motivation is caring for people at a difficult time in their lives. In her own words, *'My heart is for people who are dying'*. She saw that although she could help a few people through her own clinical work, she could reach even more through training and teaching by equipping others to provide care.

Julia was one of the founding members of APCA and their Deputy Director from 2007–2010. This role had provision of essential medicines, including analgesics in African countries at the heart of it. Her current role at Makerere University in Kampala involves clinical supervision of the palliative care team at Mulago Hospital (National Referral Hospital for Uganda) and teaching courses that include access to morphine as a priority for pain relief in adults and children. Pain relief is always top of the list because barriers to accessing morphine can at times appear insurmountable. The fears and stigma of addiction and abuse still outlaw morphine in many countries. Through her work with APCA, Julia has helped lead workshops on drug accessibility and availability, and develop plans to address barriers to morphine access in East, West and Southern Africa. She also helped develop the APCA African Palliative Care Outcome Scale (POS) and the developing paediatric POS (POS – the only outcome measure for palliative care validated in Africa). She is a board member of the International Association of Hospice and Palliative Care (IAHPC) and a Research Fellow at the Cicely Saunders Institute, Kings College, London.

In 2007, Julia completed her PhD that looked at the impact of palliative care in rural Uganda (Rukungiri). This led to access of morphine, strong analgesics and pain assessment in patients. A quote from her research by a health-care worker says it all: *'We don't assess pain because we can't do anything about it'*.

Mhoira Leng

Dr Mhoira Leng is the Head of MPCU. She was born in what is now West Papua. Her parents were medical missionaries in the jungle there, but she grew up in Scotland. As a medical student at Aberdeen University, Mhoira went back to her roots in West Papua on her elective.

Pain relief in Uganda

She's passionate about how unacceptable it is that so many in the world are without medical and palliative care among all the other global inequalities. Mhoira is motivated by her Christian faith. The sharing of our common humanity fuels her desire to alleviate suffering. Mhoira describes being humbled daily while working alongside some of the most vulnerable who, in their turn, are the best teachers.

Mhoira qualified in palliative care and took up a consultant post in Aberdeen. Although this job was incredibly challenging and stretching, she took opportunities to be involved in international palliative care with short teaching trips to Belarus and Ukraine. In 1999, she visited India and met Professor MR Rajagopal, and remains involved through short visits and teaching support. This experience helped her to learn about international pain and palliative care, and develop her own skills in working and teaching internationally. Interestingly, pain and palliative care services are fully integrated in some parts of India.

In 2006, Mhoira left the NHS and set up Cairdeas International Palliative Care Trust. She became its Medical Director in order to provide expertise and support for developing palliative care services. Mhoira then moved to India to work with Pallium India, colleagues in Christian Medical College, Vellore, and other centres. She spends 1–2 months in India every year, mainly training and mentoring colleagues in North and East India where there are very few palliative care services. She has taught in 16 states in India and is a life member of Indian Association for Palliative Care. In 2008, Makerere University invited her to develop an academic model for palliative care in the government hospital. HAU later invited her to work with them in the development and delivery of the degree programmes. Mhoira was the founding lead of MPCU, and trained 27 link ward nurses (to liaise with MPCU) as well as pharmacists in Mulago Hospital and developed palliative care protocols that include basic approaches to pain relief. As an academic unit within internal medicine at Makerere University, the aim of MPCU is to operate a centre of excellence that improves access to quality, evidence-based palliative care for patients and families. MPCU runs a clinical service that is integrated within Mulago Hospital, carries out research, training and capacity building and develops future leaders in African palliative care. MPCU and HAU train medical undergraduates in palliative care introducing the principles of pain relief.

Mhoira has also valued the privilege to have visited and taught in 10 countries in Africa. She is a Board member of the IAHPC and Honorary Lecturer at Edinburgh University, working in collaboration with the Global Health Academy. Mhoira is a mentor on the International Leadership Development Initiative, now run from OhioHealth (formerly the San Diego Institute of Palliative Care).

Her passions are for value-based education, curriculum development, mentorship, empowerment and developing sustainable, integrated modes of palliative care in government settings. Her inspiration comes from seeing those she has been privileged to work with begin to lead, train and develop others.

One of Anne Merriman's favourite sayings is that African palliative care needs people with 'fire in the belly' to develop and deliver its service. There is no doubt that these three people fulfil that description and are an inspiration to us all.

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Updates from Pain in Developing Countries SIG: Essential Pain Management

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Many of you will be aware of an educational initiative called *Essential Pain Management* (EPM), created by Roger Goucke and Wayne Morriss with the Australian and New Zealand College of Anaesthetists (ANZCA) and their Faculty of Pain Medicine. You may also have seen a version of this call for interest article in the publication '*Transmitter*', the newsletter of the Faculty of Pain Medicine of the Royal College of Anaesthetists (FPMRCA).

EPM provides a set of workshops aimed at improving pain management through education in basic principles and the identification of local barriers to delivering effective care. A vital component is the early handover of the teaching of EPM to the local health-care workers. A standard EPM course is completed in just three days. Initially designed for low resource settings, EPM has now been run in many countries and several continents, with support from various organisations, including ANZCA, the World Federation of Societies of Anaesthesiologists and the International Association for the Study of Pain. I contributed to a set of EPM workshops in Malaysia; Douglas Justins taught on an EPM course in Myanmar and Jonny Rajan, an anaesthetic trainee, assisted on an EPM course in Nepal. The Association of Anaesthetists of Great Britain and Ireland (AAGBI) supported both Douglas and Jonny's trips to Asia. A series of EPM workshops, generously sponsored by the British Pain Society (BPS) and the AAGBI Foundation, has recently been run in Mulago Hospital, Kampala, Uganda. An account of this project is planned for a future edition of *Pain News*.

The increasing worldwide popularity of EPM workshops and the need to spread the workload has led to the creation of a UK-based EPM Working Group, which has the support of the FPMRCA Board, the BPS Council and the EPM Sub-Committee of ANZCA. The remit of this working group, led by Douglas Justins, Kate Grady and myself, is to coordinate future EPM workshops to be run by UK-based instructors in parts of Africa in the first instance. In order to facilitate this, we are compiling a database of volunteers who are interested in teaching in EPM workshops. If you would like to be included in this list or would like to assist the development of EPM in other ways, please contact us via Dawn Evans at the FPM (fpm@rcoa.ac.uk). If you have contacts in Africa or experience of teaching in Africa, we would love to hear from you. More specific details regarding the EPM workshops, including some sample, basic, course materials are available at http://www.anzca.org.nz/fpm/fellows/essential-pain-management.

Call for volunteers

We are looking for UK based instructors who are interested in teaching pain management in an overseas setting.
Please contact Dawn Evans at the FPM (fpm@rcoa.ac.uk) if you are interested in finding out more about this project or would like to be included in future correspondence related to the work of the EPM UK Working Group.

News

Northern Ireland Pain Commissioning Meeting

The British Pain Society

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SAGE

Dr Pamela F Bell *Chair, The Pain Alliance of Northern Ireland*

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On 10 September, health-care professionals, carers and patients from all regions of Northern Ireland gathered for a Pain Commissioning Meeting at Riddel Hall. The event was a joint venture of the British and Northern Ireland Pain Societies, the Long Term Conditions Alliance Northern Ireland (LTCANI), the Patient and Client Council (PCC), the Northern Ireland Confederation of Health and Social Care Organisations (NICON) and the Pain Alliance of Northern Ireland (PANI), working in partnership with the Pain Therapy Group of the Association of the British Pharmaceutical Industry, Northern Ireland, who provided financial aid and logistical support.

Commissioning meeting speakers From left to right: Dr William Campbell; Dr Pamela Bell; Mrs Sarah Muckle, Consultant in Public Health, Kirklees; and Dr Martin Johnson.

Happy panellists From left to right: Mrs Louise Skelly, Director of Operations, Patient and Client Council; Dr Pamela Bell, Chair, Pain Alliance of Northern Ireland; and Dr William Campbell, President BPS.

The meeting opened with a presentation of the preliminary results of the survey of patient experience of pain and pain services (both primary and secondary care) carried out by the PCC. *'The Painful Truth: 2,500 Patients Tell their Story'* makes difficult reading for those who practice in this field, but really holds no surprises. Patients report that they often feel ignored, disbelieved and patronised by health-care professionals. Many wait years to get a firm diagnosis of the cause of their pain, and feel dissatisfied with the care that they receive. The impact of the pain on their work, social and family lives is clear, as is their frustration with the lack of signposting or referral to appropriate services. They would like to see education and training in pain management for all health-care professionals enhanced, better support to allow them to manage their condition and a coherent strategy for delivery of services that are accessible and appropriate to their needs. This survey has gathered an immense amount of data. This first publication goes to the PCC Board for approval on 15 October; further analysis of the data by region of domicile, age, gender and diagnosis is planned.

Delegates then heard from Sarah Muckle, Consultant in Public Health, Kirklees, about the approach that they had adopted to transform services to those who suffer long-term pain. The basis of their work was a joint strategic needs assessment to identify those most vulnerable to the effects of long-term pain. They worked closely with their population and developed a range of strategies to support patients in self-management of their pain and provided education to general practitioner (GPs) and other health-care professionals, particularly in primary care and community settings, to ensure that the services were sustainable. Their strategy has been effective in early intervention and when assessed against the World Health Organization (WHO) model of health has demonstrated its effectiveness. There are many lessons for Northern Ireland arising from this and much discussion ensued – particularly around the use of health trainers as part of the early intervention strategy.

Dr William Campbell introduced the Map of Medicine and the British Pain Society's role in developing the Pathways of Pain. Dr Martin Johnson elaborated on these as he demonstrated how they could be used to inform commissioning of pain services at both primary and secondary care level.

The afternoon finished with round table discussions to determine the actions that delegates wished to be taken to most improve pains services. Of these, the three deemed most important for immediate action were education for GPs

and health-care professionals at every level of the system, health-care funding to be identified for Condition Management Programmes currently funded by the Department of Employment and Learning (but funding under threat) and better engagement with colleagues in the Public Health Agency. In the longer term, key objectives were a single point of entry in services for pain management and the development of a regional strategy for pain.

Since the meeting, along with the Chief Executive and the Director of Operations of the PCC, I had a lengthy meeting with the Chief Medical Officer (CMO); during this meeting, we presented the results of the PCC survey of patient experience. He is now of the opinion that there is value in the development of a Strategic Framework for Long-term Pain for Northern Ireland. Follow-up meetings will be arranged with the intention that the CMO, or perhaps the Minister, will announce this at the official launch of *'The Painful Truth: 2,500 Patients Tell their Story'* in the spring. The anticipated time to develop the framework is 6–9 months. Perhaps by next December's issue of *Pain News*, we will be able to present it.

BPS responses to National Institute for Health and Care Excellence (NICE)

The Society is a generic stakeholder for National Institute for Health and Care Excellence (NICE) guidelines. The Society is also a generic stakeholder for Interventional Procedures and Health Technology Assessments for NICE.

Since January 2013, the Society has received over 90 communications from NICE on topics with relevance to pain. Of those, the Society has formally responded to the following topics:

- Lubiprostone for the treatment of chronic idiopathic and opioid induced constipation – Scoping Workshop attended.
- Lubiprostone for the treatment of chronic idiopathic and opioid induced constipation – Scoping Consultation Feedback
- Lubiprostone for the treatment of chronic idiopathic and opioid induced constipation - Consultation Feedback
- Headache Quality Standard - Consultation
- NICE Peripheral arterial disease Quality Standard topic overview – Consultation
- NICE Quality Standard for Headache - Endorsement
- Neuropathic Pain Guideline Consultation - Consultation
- Sickle Cell Crisis – Quality Standard Consultation
- Peripheral arterial disease quality standard - Consultation
- Lubiprostone for treating chronic idiopathic constipation [ID725] and lubiprostone for treating opioid induced constipation in people with chronic, non-cancer pain [ID646] – Advance Notice of Single Technology Appraisal. BPS to respond when it opens.
- Osteoarthritis (update) Guideline - Consultation
- NICE Scoping consultation: Naloxegol for treating opioid-induced constipation [ID674] - Consultation
- NICE Sickle Cell Crisis Quality Standard - Consultation

If any BPS members are aware of current or forthcoming NICE consultations and they would like to contribute to the BPS responses. Please contact the secretariat at: info@britishpainsociety.org

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British Society for Rheumatology launches major awareness raising campaign

Painful, debilitating, and costly, rheumatic conditions can make even the simplest tasks — such as eating, brushing your teeth and driving a car — impossible. The British Society for Rheumatology launched the campaign *Simple Tasks*.

Simple Tasks is a national awareness campaign to help people understand the negative impact of diagnosing and treating rheumatic conditions, outside what is recognised as the 'window of opportunity' – the first 12 weeks after onset of symptoms. The later diagnosis and treatment is received, the greater the chances of permanent damage, pain and disability. There are many rheumatic conditions, including rheumatoid arthritis, ankylosing spondylitis, gout, and lupus. The average time taken to diagnose ankylosing spondylitis is currently eight years and for rheumatoid arthritis this is nine months. This goes some way to demonstrate how these and other musculoskeletal conditions severely limit quality of life for millions of people and account for the loss of 10 million working days every year.

Chris Deighton, President, British Society for Rheumatology, said: "The first weeks following the onset of rheumatic symptoms, which often occur in the prime of life, are known as the 'window of opportunity'. If patients are seen during this critical time, as soon as possible, but certainly within the first weeks of experiencing early symptoms, we can help ease their suffering and avoid long-term complications."

Laura Guest, CEO, British Society for Rheumatology, added: "Musculoskeletal and rheumatic conditions affect up to 16 million people in the UK, yet rheumatology receives little recognition in health policy – this must change. It's important that the scale and severity of these conditions is properly understood and the priority of rheumatology is increased to a level proportionate to its burden on both patients and the NHS. Our *Simple Tasks* campaign aims to achieve just that."

Debbie Cook, Director of the National Ankylosing Spondylitis Society (NASS), said 'Currently many people with ankylosing spondylitis have symptoms for years before a diagnosis is made. NASS hope the *Simple Tasks* campaign will raise awareness about the symptoms of inflammatory arthritis resulting in quicker diagnosis and prompt treatment.'

Tracey Hancock, Director of Development at the National Rheumatoid Arthritis Society (NRAS), said 'The *Simple Tasks* campaign is so important to raise awareness of what is often an invisible condition, but one which has a major impact on all aspects of life, not just for the person with rheumatoid arthritis but their whole family too. The ability to carry out every day 'simple tasks' is something we all take for granted, but for those affected by rheumatic conditions it is not always the case.'

Judi Rhys, Chief Executive at Arthritis Care, said 'Musculoskeletal and rheumatic conditions have the potential to ruin lives. Yet we know that prompt treatment makes a massive difference, not only to the quality of life for the individuals affected, but also to the economic burden that results from late and inappropriate treatment. The *Simple Tasks* campaign is crucial in highlighting this important issue.'

Rayen's column

Do fish feel pain?

THE BRITISH PAIN SOCIETY

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I know one thing: that I know nothing, but the others don't even know that

—Socrates

We were happily cycling along the canal towpath on a nice sunny Sunday when we saw two anglers sitting and patiently waiting for their catch. As we crossed them, we saw one of them catching a fish with his fishing rod. Suddenly, my daughter asked me 'Does this fish feel pain daddy?' Instantly, I responded 'No, fish do not feel pain'. However, this got me thinking. *'Do fish feel pain?'*

Pain is one of the most vital, primordial survival sensations. It warns animals about the imminent danger and therefore enables them to protect the species. It has also been suggested that pain increases the fitness of the experiencing animal and plays a major role in the 'survival of the fittest'.[1] If pain sensation is so imperative for survival, do fish and all living species – vertebrate, invertebrate and plants – feel pain?

The dilemma

Pain is defined by International Association for the Study of Pain (IASP) as 'unpleasant sensory and emotional experience associated with actual or potential tissue damage or described in terms of such damage'.[2] As per this definition, the organism should feel both the physical and emotional components of pain. Can we apply this definition in all the species? Do animals consciously feel pain and suffer emotionally like humans? If so, how do we explore and prove the emotional component in all the species? Even though there is evidence that animals feel 'emotional pain', some scientists believe that some animals, which do not have the neocortex, do not feel the emotional component of pain. Thomas Nagel, an American philosopher has debated this subject when exploring the question 'What is it like to be a bat?' He concluded that unless one goes in to the head of a bat, we do not know whether the bat feels emotional pain.[3]

Another problem is that of argument – by – analogy. Pain assessment and studies in humans look at change in physical, behavioural and physiological parameters. If I accidentally burn my finger, I would expect myself to scream, possibly cry, speedily move my finger away from the flame and search for a tap to cool my finger. I should also have corresponding physiological changes like increasing heart rate and blood pressure and sweating. It is expected that animals in pain would show similar behavioural, emotional and physiological pattern like human beings. Can we apply this anthropomorphism in assessing pain in animals?[i]

Another confounding phenomenon is that some species don't show any sign of distress even in severe mutilation. The mating ritual of an insect called the praying mantis is an enthralling example of this.[4] After mating, the female praying mantis eats the head of the male insect. Even during and after this cannibalistic act, the male insect continues to copulate with the female without showing any sign of distress. Does this mean that the male insect does not feel pain?

Biologists have found difficulties in defining and assessing pain in lower forms of vertebrate and invertebrate. Zimmerman[5] defined pain as 'an aversive sensory experience caused by actual or potential injury that elicits protective motor and vegetative reactions, results in learned avoidance and may modify species-specific behaviour, including social behaviour'. Broom[6] defined pain simply as 'an aversive sensation and feeling associated with actual or potential tissue damage'. Ellwood[7] put forward the following list for assessment of pain in other species (other than human). The species

- Have a suitable nervous system and receptors;
- Show physiological changes to painful stimuli;
- Display protective motor reactions that might include reduced use of an affected area such as limping, rubbing, holding or autotomy;[ii]
- Have opioid receptors and show reduced responses to noxious stimuli when given analgesics and local anaesthetics;
- Show trade-offs between stimulus avoidance and other motivational requirements;
- Show avoidance learning;
- Show high cognitive ability and sentience (bring conscious).

Pain in vertebrates

There is less confusion about whether higher order, non-human vertebrates feel pain. They vocalise and produce physiological responses comparable to humans. However, there are still doubts as to whether lower order, non-human vertebrates are able to feel pain. Sharks and rays do not have C fibres, which are vital for pain perception. Other fishes have around 5% C fibres. Due to either lack of or less amount of C fibres and not well-developed brain, scientists believe that fish cannot feel pain.

Earlier studies in fish showed evidence that fish have a conscious pain perception. An experiment showed that electrically shocked toadfish grunted, and subsequently, it grunted by merely looking at the electrodes.[8] Rainbow trout was shown to rub their lips along the sidewall and the floor of the tank after applied with venom and acetic acid. Contrary to the above, a recent review article concluded that fishes are unlikely to experience pain.[9] The authors also criticised that the evidence reviewed were limited by their methodology. Even though the scientific world is still uncertain about this issue, Germany and Switzerland banned 'catch and release' fishing as it is considered inhumane.[10]

Pain in invertebrates

Most invertebrates do not possess complex central nervous systems like the vertebrate. Scientists strongly feel that this group of organisms lacks the tools and the ability to feel pain. Exceptions to this theory are arthropods (insects, crustaceans and arachnids) and modern cephalopods (octopuses, squid and cuttlefish). Cephalopods have a highly developed central nervous system with similar features to vertebrates. This leads us to the belief that this group should be able to feel pain. Some countries were even forced to re-evaluate their legislation on animal welfare, for example, the Canadian government, in their statement declared that

> although it is impossible to know the subjective experience of another animal with certainty, the balance of the evidence suggests that most invertebrates do not feel pain. The evidence is most robust for insects, and, for these animals, the consensus is that they do not feel pain.

The document mentions that even though cephalopods have a larger brain compared to other invertebrates, they have shorter life span; there is no parental care, most of them are cannibalistic and they don't exhibit any signals to show that they are in pain.[11]

Oh, one last thing!

We have considered both vertebrates and invertebrates, but what about plants? Do they feel pain? Earlier researchers like Sir Jagdish Chandra Bose stated that plants are aware of the surroundings and are able to feel pain. The venus flytrap senses when a fly perches on its trap and instantly clamps shut. A plant called 'touch me not' closes its leaves when it is touched. Do these actions point towards plants having a sensory awareness? Does this mean plants have sensory awareness?

Plant neurobiologists believe that plants have a nervous system with neurotransmitter, glutamate receptors, synapses and electrical conduction. The vascular system in plants is considered to be the nervous system, which transmits the signal throughout the plant. The neurotransmitter in plant nervous system is called auxin, which has an active vesicle transport.[12] Nevertheless, an open letter by 36 leading investigators disqualifies the above belief that plants have a central nervous system with neurotransmitters. They stated that they were 'concerned with the concept behind this argument' and added that 'plant neurobiology does not add to our understanding of plant physiology, plant cell biology or signaling'.[13]

Based on the available best evidence

- ***It's unlikely that plants, fishes or cephalopods feel pain***

Notes

i. Anthropomorphism: attribution of human motivation, characteristics or behaviour to inanimate objects, animals or natural phenomena.
ii. Autotomy: spontaneous casting off of a limb or other body part, such as the tail of certain lizards or the claw of a lobster, especially when the organism is injured or under attack.

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From Pain to Prospects? – helping people on welfare benefits with chronic pain

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The main mantra surrounding the Health and Social Care Bill is to 'break the silo mentality' between health and social service provision. As a general practitioner (GP) with an interest (GPwSI) in chronic pain and occupational medicine, it has always been evident that many people on long-term health-care benefits with chronic pain would benefit from better co-ordination of their health-care and employment support if they are to re-join the workforce. In my role as the Clinical Lead of a social enterprise called The Fit for Work Team, I've had the opportunity to explore this further in Leicestershire. This article describes the work we've done with people where chronic pain is a barrier to employment. This work has confirmed the suspicion that there is significant unmet health-care need for many people out of work with chronic pain, particularly for those on long-term welfare benefits. We believe the findings lend themselves to formal research. They certainly have implications for those planning the provision of health-care and rehabilitation to people with chronic pain, expected to find work as a consequence of the evolving welfare system changes.

Pain as a cause of long-term sickness absence

Most chronic pain disorders would be regarded as a disability by the Equality Act 2010. In the United Kingdom, musculoskeletal disorders are estimated to account for 15%–25% of people on Employment and Support Allowance (ESA) (Department for Work and Pensions (DWP) in 2008). Most of these will have a chronic pain component to their disability. A report by The Work Foundation in 2012[1] puts the figure higher at 60%. This report identifies that the silo mentality between health and employment/welfare provision is typical of most European countries and recommends urgent remedial action if people with painful disorders are to stay within the workforce. The National Pain Audit[2] reported that most people attending pain clinics have problems with their ability to work, and one of the key recommendations was that *'The Department of Work and Pensions should consider how to support people in pain through specific provision of vocational rehabilitation'*.

The Fit for Work Pilots – for those in employment

The Fit for Work Team is a GP-led social enterprise in Leicestershire. Our work started out with the DWP funded *Fit for Work Pilots* from 2010 to 2013. The service took referrals from local GPs to provide case-managed vocational

rehabilitation to prevent long-term sickness absence and the flow of people onto welfare benefits. In all, 94% of Leicestershire practices referred to the service, which achieved nearly 70% retention in the workplace. The six UK pilots were the forerunner of the National Health and Work Assessment and Advisory Service (HWAS) to be launched in 2014.[3] This will ensure that all people receiving fit notes for longer than 4 weeks will have access to an independent occupational health opinion.

The Leicestershire data support the findings of the National Pain Audit, with 1 in 4 of the 1,026 people with completed episodes through the service reporting chronic pain as a 'significant barrier' to work. Nearly half of these reported chronic pain as their only barrier.

A third of these people found that *'a better understanding of my pain'* was a significant factor in helping them return to work. It was interesting to note that several people had an undiagnosed neuropathic component to their pain resulting in GP correspondence to advice treatment to National Institute for Health and Care Excellence (NICE) guidelines.

The Work Programme

The government's Work Programme was launched throughout Great Britain in June 2011. It is part of the government's *welfare to work reforms* and aims to help people on benefits back into work. The principle is to incentivise employment support and rehabilitation by offering a payment by results system that rewards investment into helping those with complex health problems. Alongside this programme, there is a wholesale review of people who have been on ESA for many years with a view to returning many people to Jobseeker's Allowance (JSA) and to find work.

So how does the current provision of employment support for people with chronic pain measure up? The first two years of data were published in July 2013.[4] The return-to-work outcomes for people with health problems fell short of target by over 70%. Only 5% had found work in two years. The message is clear; people with health-related barriers to work are not currently served well by the Work Programme.

From Pain to Prospects Pilot – helping people with chronic pain on benefits to return to work

We were lucky in Leicestershire to have good support from *Jobcentre Plus* (JCP) throughout the *Fit for Work Pilot* for those in employment. The question was whether a similar approach could succeed for those on benefits? Our social enterprise successfully applied for a 'proof of concept pilot' through the JCP 'Flexibility Fund'. We wanted to explore whether people on welfare benefits with chronic pain fare better in an attempt to return to work if

1. A doctor with an interest in pain management spent quality time with them at the outset;
2. A pain management programme (PMP) is combined with employment support and job matching;
3. A case manager follows progress and helps with other hurdles to a return to work.

Our plan was to take 30 people on benefits by referral from the JCP Disability Employment Advisors (DEAs). These people cited chronic pain as a significant barrier to work. The service was voluntary, and it had to be made clear that benefit status would not be influenced by participation or outcome. We also paid great attention to document informed consent, requests for clinical information and confidentiality within the process. The process was approved by the Leicestershire Local Medical Committee (LMC) and local clinical governance leads. The Medical Defence Union raised a number of questions before going ahead. The local Research Ethics Committee considered the pilot and agreed with our view that this process was not formal research.

Initial assessment

There was an emphasis on an 'intense' initial evaluation where each person spent around 1½ hours with the team. Each person was allocated a case manager whose role was to motivate and co-ordinate their journey towards employment but also to help with non-medical problems affecting their lives such as debt or low self-esteem.

In all, 40 minutes was set aside for the clinical assessment by the GPwSI, and all people were examined. This was often their first examination for many years! painDETECT[5] was used as part of the assessment. Examination findings were recorded to categorise the pain syndrome. Standards were used for tentative diagnoses. For example, the 'Budapest' criteria for Chronic Regional Pain Syndrome[6] or American College of Rheumatology (ACR) scores[7] for fibromyalgia were used with a view to validating any findings and communicating recommendations to the person's GP.

The consultation with the GPwSI concluded with an agreed plan of action to help address the pain. Where an unmet health need was agreed, there were three clinical approaches:

1. PMP;
2. Individual physiotherapy;
3. Communication to GP of new tentative diagnosis and/or treatment recommendations.

The final part of the assessment was to meet a dedicated employment advisor from *B-working*, part of a local charity, who could look at skills and aspirations with a view to training, job readiness and job-matching.

PMP

Following a competitive tender, the PMP was commissioned from the University of Leicester Hospitals' Pain Department and delivered at Voluntary Action Leicester where the Fit for Work Team is based. The programme was delivered to the British Pain Society (BPS) standards over six sessions by a physiotherapist, occupational therapist and clinical psychologist. As far as we know, this is the first example in the United Kingdom of JCP funding being utilised to provide targeted and co-ordinated specialist National Health Service (NHS) health care to people with health barriers to employment.

Nearly two-thirds of people (19) were found to be appropriate for PMP. In all, 16 were put forward to the programme with nine completing the full 6 sessions. Improvement in function and reduced impact of pain were improved for all people finishing the PMP.

Unmet health needs

The clinical assessments uncovered clinical patterns consistent with previously undiagnosed myofascial pain syndrome, fibromyalgia or a neuropathic component to pain in over half the cases. Undiagnosed complex regional pain syndrome was identified in three of these. The findings and recommendations from the assessment resulted in communication with GPs for 22 cases. These were to consider new diagnoses (7), request alternative treatment options (4) or both (11). Copies of the letter were also sent to the patient. The case managers encouraged people to see their GPs soon after, and recommendations for treatment were put into place in every case.

Return-to-work progress

JCP set a target to place four people in paid employment, four in voluntary work and four in vocational training. A total of 6 months into the 10-month project and there are already four people in paid employment, three in voluntary work and one in training to set up her own business. Our current projections are to exceed the targets with 14 people in one of the three categories.

Themes to emerge

The team was encouraged from an early stage by the feedback from the JCP DEAs who consistently reported how motivated people were after first assessment. The majority of people to enter the service had failed applications for ESA or been taken off health benefits. Typically dispirited, cautious and even angry, it was pleasing to hear that the initial assessment put most people in a 'better place' towards considering a return to work in the context of their pain.

One of the 'jewels in the crown' of this project has been the success of bringing evidence-based intervention from Leicester Hospitals' Pain Department into a community setting through the PMP. Participants and practitioners have been positive about this service in the context of moving closer to the workplace.

Case management of complex cases is an emerging theme in health care generally and in occupational health in particular. The *From Pain to Prospects Pilot* revealed a significant need for motivation, encouragement and in some case, a certain amount of shepherding, towards addressing the barriers to a return to work. So far five people have dropped out of the service with no prospect of a return to work. This number would certainly have been higher without the support and human qualities that our case managers provide.

The willingness of GPs to accept and implement treatment recommendations is encouraging. The response to medication for a neuropathic component has been mixed, but where positive, has been a significant factor in a return to work.

Satisfaction surveys from service users have been positive so far, even for those who have dropped out of the service. The theme of bringing health-care expertise closer to the process of finding work has been welcomed.

Future possibilities

We believe that the *From Pain to Prospects Pilot* is an illustration of the sort of collaborative working across social and health-care sectors that underlies the intentions behind the new Health and Social Care Bill. The project still has four months to run to completion, but our local JCP has already asked us to explore similar models for cardiac and pulmonary rehabilitation for people on long-term benefits. We are also in the early stages of looking into how to scale up the existing service, for people with pain, into a more sustainable model. NHS England plan to introduce 'value-based commissioning' in the coming months. This combines the value that an individual patient derives from health-care interventions with the value of that investment to the whole population. Reducing the suffering from pain towards re-joining the workforce would seem to be a compelling package for such commissioning. But where is the evidence?

A frequent criticism of much of the current service provision to people on welfare is that lack of research evidence to support current practice. As a clinician hoping to bring mainstream health care closer to those on benefits with unmet health needs, it is clear that we need to encourage formal research into future plans. The aspiration of the *Fit for Work* team is to continue innovation in service delivery with a view to attracting academic rigour and research evidence to solutions that seem to be successful on a small scale. For example, the volume of 'missed diagnoses', particularly around a neuropathic component or sensitisation problem,

lends itself to validation by independent pain specialists in any future work. We're looking into options for research funding and hope to continue work with Leicester Hospitals' Pain Department towards this aim.

The scene seems to be set for targeted health-care provision for people with chronic pain on welfare benefits. Recent changes to the welfare system announced at the Conservative Party conference in October 2013 of *'mandatory intensive regime for claimants with underlying health problems'* together with the commissioning intentions in the Health and Social Care Bill should combine to facilitate such change. The *From Pain to Prospects Pilot* has tested a model to see whether it would work. Together with our colleagues at Leicester Hospitals' Pain Department, we hope and believe that this joined-up approach shows promise!

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Professional perspectives

Service evaluation – adequacy of aseptic techniques in pain clinic–based procedures

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SAGE

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Interventional procedures are one of the options available to physicians in the management of chronic pain. Any invasive procedure may be complicated by infection. The risk of infection may be enhanced in diabetic and immunocompromised patients and as a result of steroid therapy.[1]

Aseptic techniques are used by the health-care professionals to prevent infection associated with these procedures. The goal is to reach asepsis which means an environment that is free of harmful microorganisms. Each health-care setting has its own set of practices for achieving asepsis. Faculty of Pain Medicine (FPM) has set the standards of good practice for pain clinicians carrying out epidural injections in adults for the management of persistent pain of spinal origin and includes the use of epidural injection for the management of acute episodes of discogenic and/or radicular pain.[1] FPM *Best Practice Guidance* (published in 2011) states that 'meticulous aseptic technique is mandatory and this should include surgical scrub according to local policy, sterile gown, sterile gloves, cap, and mask'.

We routinely follow FPM guidance on asepsis while performing an epidural/blocks and carry out the procedures in a dedicated treatment room. We also perform ultrasound-guided interventions in our clinic. This project was aimed as a quality assurance process to evaluate the adequacy of various aseptic techniques followed in our pain clinic. We looked for microbiological assessments to appraise our standards of care and improve or modify our techniques if deficiencies were found.

Methods

The service evaluation was approved by our local research and ethics department, and the project was supported by the microbiology department. We were allowed a limited number of samples to be processed for quantitative cultures. The patients and staff consented for sampling. All patients received routine care in the pain clinic.

There were a total of four areas for evaluation:

Area 1. Swabs were taken from staff hands on three occasions (on arrival from home, after first and after second hand washing). These three swabs were collected in an outpatient clinic, between patient consultations.

Area 2. Epidural injection group, where swabs were taken before, during and post procedure from patient's skin.

Area 3. Ultrasound-guided procedures, where swabs were taken before and after application of ultrasound gel (USG) used for sacroiliac joint or perifacetal injections.

Area 4. USG from sterile single-use pouches and bottles were also sampled for microbes.

Four sets of samples were obtained from each area of interest. A total of 44 samples were collected using a technique recommended by our microbiologist. Microbiologic assessment included identification of organisms and quantifying as colony forming units (CFUs).

Results

Results shaded in pink in Tables 1 to 3 denote highest potential to cause infection. Coagulase-negative staphylococci (CNS), bacillus and micrococcus are mostly skin commensals of lower pathogenic

Table 1. Impact of hand washing on skin flora

Staff	Skin swab on arrival from home	After first hand washing	After second hand washing
1	CNS > 100	CNS > 100	CNS = 16
2	Coliforms = 3; CNS = 5; Gram-negative bacteria > 100	CNS = 1	No growth
3	Micrococcus = 1; CNS = 7	Bacillus = 1; CNS = 5	Bacillus = 1; CNS > 100
4	Bacillus = 23, coliforms = 3; Gram-negative bacteria > 100	CNS = 2	No growth

CNS: coagulase-negative staphylococci; CFU: colony forming unit.
Numbers following the microbes denote CFUs cultured.

Table 2. Impact of chlorhexidine 0.5% on epidural injection site

Patient	Baseline skin swab	After chlorhexidine spray	At end of procedure
1	Pseudomonas = 95; CNS = 2	No growth	No growth
2	CNS > 100	No growth	No growth
3	Pseudomonas > 50; coliforms = 3; CNS = 8; miscellaneous = 27	No growth	No growth
4	CNS > 50; miscellaneous > 50	No growth	No growth

CNS: coagulase-negative staphylococci; CFU: colony forming unit.
Numbers following the microbes denote CFUs cultured.

potential but can cause infection in the immunocompromised.

Discussion

A multidisciplinary Pain Clinic setting can provide an ideal condition for microorganisms to be transmitted between those who receive and give care. Every episode of patient contact, including out-patient consultation can contribute to transmission.

Pain patients who receive a depot steroid preparation are vulnerable to get infections even with skin commensals. Patients receiving interventional procedures for pain management are at risk of developing infection as a result of their compromised state of health and underlying medical conditions.

The hands of staff are the commonest vehicles by which microorganisms are transmitted between patients.[2,3] Hand washing is accepted as the single most important measure in infection control.[4] Unfortunately, staff believe that they wash hands more often than they actually do, and they also overestimate the duration of hand washing. Poorer hand washing performance was related to increasing workload and reduced availability of hand decontaminating agents in one study.[5] All hospitals have invested resources to promote hand hygiene. The compliance has increased slowly, but laggards are always seen in all clinical areas. Gloves are a useful additional means of reducing hospital acquired infections, but they supplement rather than replace hand washing. Our service evaluation used microbiologic data to reinforce the fact that we carry potentially pathogenic microbes on our hands on arrival to clinical areas. Hand washing with soap and water on arrival to clinics is as vital as hand hygiene before and after every patient contact.

Chlorhexidine 0.5% with 70% alcohol spray is commonly used for preparation of surgical sites because of its efficacy, safety and long duration of effect. It is widely used in the United Kingdom for skin preparation prior to spinals and epidurals. The use of a concentration of chlorhexidine gluconate more than 0.5% cannot be supported; this concentration is evidently effective, but a greater one might increase the risk of neurotoxicity from inadvertent contamination and therefore should be

Table 3. Before and after ultrasound-guided facet joint injections

Patient	Baseline skin swab	After chlorhexidine spray and gel	At end of ultrasound procedure
1	Gram-positive cocci (non-*Staphylococcus*) > 100; CNS > 10	No growth	CNS = 1
2	CNS = 2; bacillus = 1	No growth	Bacillus = 1
3	Environmental Gram-negative bacteria > 100; CNS > 100	No growth	No growth
4	CNS = 11	No growth	No growth

CNS: coagulase-negative staphylococci; CFU: colony forming unit.
Numbers following the microbes denote CFUs cultured.

Table 4. Culture of USG gel. Commensals cultured from gel are considered as clinically significant contamination.

Sample source	Sample 1	Sample 2	Sample 3	Sample 4
Refilled bottle	CNS = 4; miscellaneous = 2	No growth	No growth	No growth
Sterile sachet	No growth	No growth	No growth	No growth

CNS: coagulase-negative staphylococci; CFU: colony forming unit.
Numbers following the microbes denote CFUs cultured.

avoided.[6] Our results showed that chlorhexidine 0.5% with 70% alcohol sprayed on to skin resulted in rapid disinfection and no growth was found from skin swabs.

Currently, there is insufficient data to make definitive recommendations with regard to routine gown use in theatre environment during a regional block; however, FPM have recommended using sterile gowns for neuraxial blocks.[1]

There is tremendous amount of controversy on the use of facemasks by theatre personnel, specifically during performing regional anaesthetic techniques. Several clinicians quote that facemasks are a critical component of asepsis,[7,8] whereas others argue that their use is not based on definitive scientific evidence. A postal survey reported that 51% of practitioners do not routinely wear masks when performing epidurals or spinal blocks.[9] Schweizer showed that surgical masks may significantly increase the amount of wound contamination. It is postulated that under these conditions, skin friction with the mask may release scales that carry a significant amount of bacterial contaminants.[10]

Phillips and colleagues demonstrated that wearing a facemask results in marked reduction in the bacterial contamination of a surface in close proximity to the upper airway. Bacterial colonies grew on more than 50% of agar plates placed 30 cm away from providers who were speaking without a mask. A fresh mask nearly abolished contamination, whereas a small increase did occur after 15 minutes of wear.[10] Although this increase was statistically insignificant, the authors recommend that it may be advisable to wear a new facemask for each procedure or each patient encounter.[11,12]

In our hospital, we routinely use a facemask, gown and gloves for every epidural procedure. None of the skin swabs obtained at the end of procedure showed any contamination from the operator or the local environment. This result has encouraged us to continue the scrupulous aseptic technique being followed in our treatment room.

Ultrasound (USG) has been found to permit bacterial growth and does not have any bactericidal or bacteriostatic properties; so, USG can get easily contaminated by pathogens.[13] *Pseudomonas aeruginosa, Escherichia coli* and *Staphylococcus aureus* were all demonstrated to survive in USG in an in-vitro study.[14] Food and Drug Administration (FDA) recommended that the only USG that is sterile is unopened USG containers/packets labelled as sterile. Once a container of sterile or non-sterile gel is opened, it is no longer sterile and contamination during ongoing use is possible. Only sterile USG is therefore recommended in clinical practice, where invasive procedures are performed.[15] In our hospital, we use bottled gel for casual scanning and single-use sterile sachets while performing ultrasound-guided blocks. Our service evaluation data showed that sterile sachets were indeed sterile but one of the gel sampled from a bottle grew skin contaminants.

Conclusion

Microbiological snapshot data collected from our pain clinic highlighted the following:

1. Pathogenic bacteria can be found on staff hands and patient's skin and 'Seven Step Hand Washing' should be encouraged as an effective tool to clean our hands before every patient contact.
2. Cap–mask–gown–gloves–drape and chlorhexidine 0.5% with 70% alcohol skin spray is an effective combination for achieving asepsis for an epidural/ultrasound-guided block in our unit.
3. USG sampled from refilled bottles did show contaminants, so we now only use sterile gel at skin interface for ultrasound-guided procedures.

Results of our service evaluation encouraged the pain team to continue following basic hand hygiene and scrupulous aseptic techniques for invasive procedures. A service evaluation involving microbiologic data proved to be a very useful way to appraise our clinical practice and reinforce good practice.

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Professional perspectives

Quality-of-life improvements after spinal cord stimulator insertion for chronic pain

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SAGE

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The National Institute for Health and Care Excellence (NICE) and the British Pain Society (BPS) support spinal cord stimulator (SCS) as a beneficial therapy for certain chronic pain conditions.[1,2] At Chelsea and Westminster Hospital, we have been implanting SCS devices for chronic persistent pain for over 5 years. Understanding the importance of outcome data, we followed up our SCS patient population, with a telephone questionnaire. We managed to contact 64% (27 patients) who had devices implanted from September 2006 to March 2012. The majority of patients reported continued significant benefit as perceived by them. The reported outcomes showed improvement in pain management (85%), mood (63%) and quality of life (78%) years after insertion. Almost half of our patients (48%) had managed to accomplish personal goals, including returning to work and going abroad on holidays. There was a low complication rate and none had a long-term impact. These positive results support the continuation and expansion of SCS implantation within our department.

Introduction

Spinal cord stimulation, a form of neuromodulation, aims to reduce painful sensations by non-painful stimulation of the neural pathway. Melzack and Wall,[3] with the publication of their gate theory in 1965, paved the way for the use of a variety of stimulation techniques to manage pain. Initially, peripheral techniques were trialled, with the first report of an implanted device for central neuromodulation in 1967 by Shealy et al.[4] Techniques and equipment, along with understanding of the mechanisms and patient selection, have advanced enormously since then to develop a spinal cord stimulator (SCS) into an effective pain management therapy. Pain relief by SCS involves more than direct inhibition of pain transmission in the dorsal horn of the spinal cord. The mechanism of spinal neuromodulation is only partially described but is likely to involve supra spinal activity via the posterior columns, alternations of neurotransmitters such as gamma-aminobutyric acid (GABA) and adenosine and a concurrent, pronounced autonomic effect.[5] Some preservation of topographically appropriate posterior column function seems to be necessary for SCS to be effective.[5]

National Institute for Health and Care Excellence (NICE) recommends SCS as a form of therapy for chronic pain of neuropathic origin, and the BPS supports the use of SCS as part of the multidisciplinary team approach.[1,2] Evidence from randomised controlled trials support the use of SCS in failed back surgical syndrome (FBSS), complex regional pain syndrome (CRPS type 1), neuropathic pain and selected patients with ischaemic pain (refractory angina pectoris and chronic critical limb ischaemia).[2] Trials have shown improvement in pain relief, quality of life and a reduction in analgesic usage following SCS implantation.[2] As SCS becomes more widely available and technology advances, other chronic pain conditions that may benefit from SCS are emerging.[6] Positive results have been

shown in radicular pain, phantom limb pain, diabetic neuropathy, post herpetic neuralgia and ischaemic pain associated with peripheral vascular pain.[5,7] Neuromodulation techniques are concurrently being developed for the management of a variety of neurological conditions, including epilepsy, Parkinson's disease, movement disorders, psychiatric diseases and spasticity.[8] Professional bodies support the need for further high-quality research on the use of SCS.[1,2]

SCS implantation appears to be a safe technique with major complications rare in long-term follow-up.[2,9] Minor complications can occur with relative frequency.[2,9] While infection remains of great concern when considering implantable devices, the most common complications involve electrode lead migration.[9] Complications can include cerebrospinal fluid leakage, spinal epidural haematoma, neurological damage relating to epidural electrode placement, pain related to implanted device site insertion and technical issues such as lead breakage, disconnection or battery issues. Strict adherence to infection control measures, including aseptic techniques and prophylactic antibiotics along with patient education appears to reduce infection rates.[10]

At Chelsea and Westminster Hospital

Implemented by a multidisciplinary team in parallel with other therapies, Chelsea and Westminster Hospital has been implanting SCS for over 5 years. We currently trial an average of 25 patients annually with an implantation rate over the last 24 months of 62%. Patients who may benefit from SCS treatment are initially assessed in our multidisciplinary SCS assessment clinic. This service provides psychology, nursing and physician assessment as well as providing verbal and written patient information and education.[11] Assessment or further treatment by neurosurgical, orthopaedic or other specialist teams may be necessary prior to SCS trial. SCS implantation precludes magnetic resonance imaging (MRI), although new technologies are being introduced which are MRI compatible. Therefore, the assessment additionally ensures that outstanding medical conditions are investigated and managed prior to SCS implantation. Those patients who may benefit from a pain management programme undertake this in parallel to the SCS assessment pathway. Following conclusion of all outstanding issues, the eligible patients are offered a trial. Those patients assessed during the trial as having significant improvement in pain and functional scores are then offered full implantation. We provide ongoing follow-up to the implanted patients with additional support from the manufacturers to allow reprogramming as required.

The benefits of pain management therapies such as SCS are difficult to measure due to the heterogeneity of symptoms and subjective nature of pain. Patient-reported outcome measures are becoming increasingly important when evaluating the effectiveness of therapies. NICE and the BPS recommend long-term follow-up and audit of SCS services.[1,2] We recognise the importance of follow-up and therefore looked to assess the clinical effectiveness of our SCS service. A telephone follow-up of our SCS patient population was undertaken. We used a combination of questions to review the effectiveness of treatment focusing on ongoing pain relief, ability to self-manage pain, changes in quality of life, expectations and achievement of personal goals and global perception of change. Our intention was to assess the long-term effects of the service we are providing in order to better inform ourselves and our patients, and to guide future quality improvement measures.

Method

We performed a telephone questionnaire on all traceable patients who have had a SCS inserted at Chelsea and Westminster Hospital, London, between September 2006 and April 2012 for the treatment of neuropathic pain. The questionnaire was designed to evaluate most of the core outcome measures suggested in the Initiative on Methods, Measurement and Pain Assessment in Clinical Trials (IMMPACT) recommendations.[12] It included questions on pain management, functional level (both physical and emotional), global quality-of-life improvements, patient expectations and achievement of goals. We additionally reviewed short- and long-term complications in order to generate our local complication rate. Contact details were obtained from the hospital records and verbal consent was obtained from each patient. If no response to the initial telephone call was obtained, patients were contacted again up to a maximum of five times. If no response or consent was obtained, then these patients were classed as non-responders. The information obtained from the responders was analysed. A notes review was performed on responders to obtain additional information.

Results

The results are presented in Table 1 and Figures 1 and 2.

Discussion

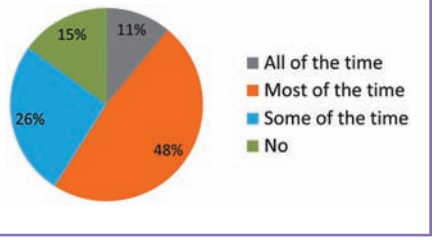
SCSs, trialled and implanted under our local protocols, are effective long-term treatment for chronic pain. The majority continue to be effective resulting in improvement in pain symptoms (85%), mood (63%) and quality of life (78%) years after insertion. Significant self-reported improvement in pain symptoms occurred in 85% of patients: 26% some of the time, 48% most of the time and

Table 1. Survey results

Responded	64% (27/42)
Mean follow up time (months)	24 (Range 2-67)
Indicators for SCS insertion	
Non ischaemic neuropathic pain:	
Back/lower limbs	70%
Upper limbs	19%
Ischaemic refractory angina	11%
Percentage area covered by stimulation	100%/25 (mode/IQR)
Percentage pain relief	80%/40 (mode/IQR)
Complications	
Infection	7%(3)
Catheter migration/fracture	7%(3)
Thromboembolism (peripheral lower limb)	2%(1)

IQR: inter-quartile range.

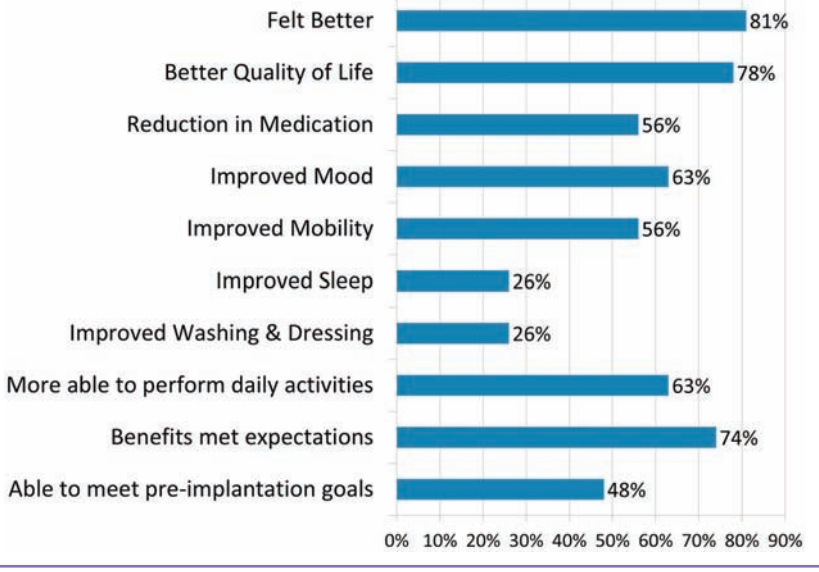
Figure 1. Improvement in self-management of pain



11% all of the time. Almost half of our patients (48%) managed to accomplish personal goals, including returning to work or going abroad on holidays. Only 26% of patients reported improvement in their sleep. This low figure was found to be influenced by other medical issues, those patients who didn't use the SCS while sleeping and the fact that some patients had no sleep issues prior to implantation. All those patients (8) who had had their SCS over 3 years continued to have improved pain symptoms and 87.5% felt their mood and quality of life was improved. Long-term benefits from SCS increases the cost-effectiveness of this treatment. It is notable that three patients had a SCS inserted for refractory angina pectoris. Although there is evidence to support this indication, it is not currently a NICE recommended indication.[1,13] Of these three patients, all felt better after their SCS implantation, with over a 50% improvement in pain symptoms. They felt better able to manage their pain, had an improved quality of life and were able to reduce their regular analgesic and coronary vasodilatory medications.

Of those patients who reported little benefit from their SCS, one patient requested it explanted, two developed pain in sites other than their original site and one developed chronic pain at the insertion site. Overall, there was a low complication rate and none had a long-term impact. Infections are thought to be the most significant complication, and rates published in the literature are between 4% and 10%.[14] Infection rates are thought to be influenced by experience of operator, previous spinal surgery and medical conditions such as diabetes.[14]

Figure 2. Improvement in quality of life



Conclusion

Spinal cord stimulation is a technology undergoing rapid development for the treatment of chronic pain. As techniques and technology have improved, so has SCS availability. The number of conditions for which SCS or neuromodulation are being trialled is expanding. To establish the effectiveness of pain management therapies, outcome scoring, audit and follow-up of treatments are essential to providing the best and most appropriate therapies to our patients. The results identified in the long-term effectiveness of SCS therapy implanted under our local policies support the continuation and

expansion of SCS implantation within our department.

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Informing practice

Waiting times for access to a UK multidisciplinary chronic pain service: how do we comply with IASP recommendations?

The British Pain Society

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SAGE

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This audit was presented in part as a poster at the British Pain Society Annual Scientific Meeting in April 2013 at Bournemouth

The Montreal Declaration 2010[1] recognises timely access to pain management as a fundamental human right. Evidence shows that long waiting time for chronic pain treatment is associated with significant deterioration in health-related quality of life and psychological well-being.[2] Further research is necessary to identify the time-point of the beginning of these deteriorations, but it is likely that it would vary for different pain conditions. It is also unknown whether the waiting time has any impact on treatment outcomes. Multidisciplinary treatment remains the standard of care for complex chronic pain, leading to decreased use of the health-care system with significant reductions of indirect health-care costs.[3,4]

There are significant differences in the waiting time benchmarks in different countries causing inequalities and confusions among the health-care providers and commissioners alike (Table 1). In order to ensure the fundamental human right of pain management as recognised by the Montreal Declaration, patients all over the world should have access to appropriate care within a universally accepted waiting time. To address this issue, International Association for the Study of Pain (IASP) established a task force in January 2009, which identified appropriate benchmarks for wait-times for treatment of chronic pain and endorsed a document in 2010.[5]

In the United Kingdom, there is no agreed guideline for medically accepted waiting times tailored to different pain conditions. Triaging is subjective and generally based on the information provided by the referrer. The 18 weeks waiting for routine/regular referral to treatment is generic and not specific to chronic pain management. We evaluated the current practice of waiting time in our multidisciplinary pain management unit, checked compliance with the IASP recommendations, analysed possible causes for non-compliance and recommended changes.

Audit standard

Waiting time is defined by the time between referral to initiation of condition-specific treatment. The IASP Task Force on Wait-Times proposed the following recommendations for access to appropriate pain management services:

Group 1. Acute painful conditions should be treated immediately (e.g. sickle cell painful crises, acute herpes zoster and pain related to trauma or surgery);

Group 2. Most urgent (1 week) – a painful severe condition with the risk of deterioration or chronicity, such as the acute phase of complex regional pain syndrome (CRPS), pain in children or pain related to cancer or terminal or end-stage illness;

Group 3. Urgent or semi-urgent (1 month) – severe undiagnosed or progressive pain with the risk of increasing functional impairment, generally of 6 months duration or less (back pain that is not resolving or persistent post-surgical or post-traumatic pain);

Group 4. Routine or regular (8 weeks) – persistent long-term pain without significant progression.

Table 1. Variations in wait-time benchmarks in different countries (extracted from IASP document[5])

Country	Triage label and waiting time		
	Most urgent	Urgent	Routine
United Kingdom	18 weeks for all conditions		
Australia	1 week	1 month	3 months
Canada	2 weeks	1 month	3 months
Finland	1 month	3 months	6 months
Norway	2 weeks	16 weeks	16 weeks

IASP: International Association for the Study of Pain.

Table 2. Patient demographics

Patient demographics	
Total number of referrals	162
Male: Female	1: 2 (53: 109)
Age (years)	21–87 (mean: 54.14)

Methods

We audited consecutive new patient episodes in our multidisciplinary chronic pain management unit over a 3-month period. We chronologically recorded the time of first symptom, general practitioner (GP) consultation, referral date, postal delay, triaging delay, specialist consultation and initiation of definitive treatment. Majority of the referrals were made through the Choose and Book system by GPs. Other referring health professionals include advanced musculoskeletal practitioners, acute pain service and other hospital consultants. All referrals were initially triaged by chronic pain consultants and marked as either 'routine' or 'urgent'. Although there is no agreed waiting time for these categories of triaging in the current system, the central appointment office prioritises the 'urgent' cases according to the availability of outpatient slots. Occasionally, a specific waiting time is requested for most urgent cases as considered appropriate by the triaging consultant (e.g. acute phase of CRPS). However, as there is no provision of urgent slot, overbooking the clinic usually accommodates these requests. We recorded the waiting time as defined by the time from referral to initiation of condition-specific treatment. In cases where the treatment was initiated by the GP or other practitioners before the pain clinic consultation, the consultants judged the appropriateness of the treatment specific for that particular condition for the purpose of audit.

Results

We collected data of 162 consecutive new patient consultations over a 3-month period. Among them, 112 (69.1%) were referred by GPs, 37 (22.8%) by consultants of the same hospital, 3 (1.8%) by consultants from different hospitals and 9 (5.6%) by the advanced musculoskeletal practitioners and 1 from acute pain team of the same hospital (Table 2).

Table 3 shows the number of patients grouped according to the IASP recommendations and their waiting times (from referral to consultation and from referral to treatment separately). There were 2 most urgent (group 2: IASP-recommended maximum wait – 1 week), 20 urgent (group 3: recommended maximum wait – 1 month) and 140 routine cases (group 4: recommended maximum wait – 8 weeks). Overall, the average waiting time from referral to treatment in all groups failed to meet the recommendations (8.2, 8.5 and 11.4 weeks, respectively, for most urgent, urgent and routine).

Discussion

This audit provides a snapshot of the average waiting times for chronic pain patients in our unit. There are now standardised guidelines/recommendations regarding waiting times for specific pain conditions.[5] However, the actual practice is likely to be influenced by availability of local manpower, resources and workload. The IASP recommends that clinicians should be aware of all relevant treatment guidelines to direct patients to appropriate services in a timely manner. The Map of Medicine (MoM)[6] initiative is a major step forward in this regard and is able to provide the up-to-date guideline for the primary care physicians as well as specialists.

While capacity was a major issue for the non-compliance with the IASP recommendations of waiting times in our unit, cause analysis also revealed that average delay for triaging was 2.1 weeks (2 days to 5.7 weeks), which could be improved with better referral and triaging system (Table 4). Interestingly, average delay for triaging urgent cases were longer than routine cases that could be incidental. Nevertheless, it points out the importance of early triaging so that urgent referrals could be picked up for initiation of treatment sooner.

It was also felt that other professionals such as specialist nurses or physiotherapists could also do triaging if the referral letters were more informative and structured. This could potentially reduce the waiting time and free up consultants to be able to spend more on direct clinical care (DCC).

We recommended the following changes towards achieving compliance with IASP recommendations:

Table 3. Average waiting times for referral to consultation and referral to treatment in comparison to IASP standards.

	Standard	Number	Referral–consultation	Referral–treatment
Group 1	Immediate	0		
Group 2	1 week	2	6.2 weeks	8.2 weeks
Group 3	4 weeks	20	6.5 weeks	8.5 weeks
Group 4	8 weeks	140	9.5 weeks	11.4 weeks

IASP: International Association for the Study of Pain.

Table 4. Triage delay (from referral to triaging)

Triage label	Number	Average delay	Range
Routine	142	2 weeks	2 days to 5.7 weeks
Urgent	20	2.5 weeks	5 days to 4.5 weeks

1. Standardised referral forms for the primary care physicians and advanced musculoskeletal services. These would have enough information for the triaging person (consultant, nurse or physiotherapist) to classify and request central appointment office for appointments accordingly (very urgent, urgent and routine).
2. We are addressing triage delay by encouraging referrers to use Choose and Book, or faxing the urgent referrals to avoid postal delay. Previously, consultants triaged their own patients only that caused some delay if the particular consultant was on leave. With the new system of triaging, we have agreed to triage all referrals regardless of the allocated consultant (non-consultants would do majority of the triaging).
3. We are working on preparing departmental pathway for specific conditions so that the first contact could be a different person than a medical doctor (e.g. CRPS patients on appropriate anti-neuropathic medications could get a physiotherapy appointment reasonably early to initiate desensitisation). This provision is accepted with the understanding that the allied professional has the facility to book an urgent appointment slot with the consultant if necessary.
4. We have introduced the provision for one urgent appointment slot (new – 45 minutes) every week that is filled up locally by the departmental administrators to see very urgent patients or patients referred by the allied professionals.

Conclusion

The result of this audit shows that the current trend of waiting times in our unit for different pain conditions does not comply with the medically accepted waiting times recommended by the IASP. We recommended that the triaging delay should be addressed, and referrers should be encouraged to use standardised forms using Choose and Book or fax to minimise postal delay. Departmental pathways should be introduced for the management of specific chronic pain conditions (in line with existent guideline such as MoM), and the provision of urgent appointment slots should be ensured.

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Informing practice

The British Pain Society

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SAGE

Does the South Devon Pain Management Services meet the needs of patients who report return to work/retention in work difficulties?

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The present service evaluation aimed to identify the return-to-work (RTW)/retention in work needs of patients seen within the pain service. A mixed-methodology approach was used, comprising surveys (yielding quantitative and qualitative data), and a focus group. An initial survey was developed to identify the vocational needs of new patients seen within the service, and distributed for a 12-week period to physiotherapy and consultants' clinics. A total of 148 surveys were returned (response rate 35.6%), with 69.6% of patients reporting that their pain had an impact on their ability to work. A 3-month follow-up survey was sent to the above respondents. When asked about the ways in which the pain service has helped, common responses included *'being supported to be more physically able'* and *'addressing concerns about damage'*. With regard to areas still to be addressed, common responses included *'help to get back to work'* and *'address concerns about financial or litigation issues'*. A focus group was undertaken involving five patients who identified RTW needs. Three overall themes emerged: *'negative perceptions'*, *'knowledge and understanding'* and *'problems with the system'*. Participants described perceptions of negative attitudes from employers, job centre staff and others and a misunderstanding of their capabilities. They also felt that general practitioners (GPs) and job centre staff need further knowledge of the chronic pain, and difficulties with the benefits system were described. Suggestions were made by participants for future service provision. These included the introduction of a 'link person': a worker with knowledge of chronic pain but able to advise and advocate regarding RTW issues. Limitations of the service evaluation are discussed in the report, and recommendations for future developments are made.

Background

The psychological, financial, social and health benefits of work and employment are fully recognised (Black[1]). However, the difficulty for patients to stay in work, or to RTW after an extended sickness absence is also well researched (Black,[1] Campbell et al.[2]). Anecdotally, many patients attending the local pain management services report difficulty for staying in, or returning to meaningful work. This, in itself, will impact on their well-being and potential to recover. However, it is not known exactly what the needs are of this cohort of patients, to what extent the health-care clinicians address these needs or the opinions of patients as to what they feel would be most useful to help them to meet their work-related difficulties.

In 2007, Dame Carol Black commissioned the Peninsula Medical School to scope a pilot project for developing an early intervention to maximise patients' ability to RTW or stay in work when presenting with health problems in primary care. A mixed-methods study comprising a literature review, in-depth interviews (GPs and occupational health/human resources representatives) and an online survey (GPs) was undertaken. The aim was to establish current evidence for best practice for these patients, and the opinions of GPs as to what they felt would facilitate recovery (Campbell

et al.[2]). The findings endorsed the value of an interdisciplinary clinical team to address: medical management of underlying conditions, exercise/physical training, psychological interventions (e.g. cognitive behavioural therapy) and educational interventions (e.g. stress management training). In addition to this, the GPs advocated that for patients with musculoskeletal problems, additional vocational support should possibly be provided outside of the GP setting (Wright et al.[3]). It was also advised that the opinion of patients should be sought.

In November 2011, the physiotherapy and psychology pain management services were granted £3,885 by the Torbay Medical Research Fund. This was to enable the employment of a research assistant to undertake a service evaluation of new patients attending clinics (doctors and physiotherapists). The aim of the evaluation was to identify whether their presenting pain problem was affecting their ability to stay in, or return to (self-)employment (RTW) and whether input from the pain team had met these needs. Respondents were also invited to attend a focus group to explore any suggestions that they may have to enable the team to better meet their needs.

Service evaluation questions

1. What are the needs regarding RTW/retention in work issues?
2. Are we helping them to meet these needs?
3. What do this group of people feel would be useful to help address their RTW/retention in work needs?

Methods

New patient survey

The new patient survey was developed in the context of the service evaluation questions and a previous RTW survey. This was trialled with staff and patients prior to its use. The survey was approved by Clinical Effectiveness as a service evaluation, therefore not requiring ethical approval.

One of the authors (I.K.) identified new patients from the consultants' and physiotherapists' clinics via the hospital computer systems. I.K. had previously contacted, and where possible, met with clinic support staff to ensure that numbered surveys were appropriately distributed to all new patients attending consultants' clinics. Numbered surveys were distributed to physiotherapists for their new patients at the beginning of each week. She monitored return rates and where possible, prompted staff if there was a low return rate. Completed surveys were returned directly to I.K. who entered the data on a password-protected computer. To ensure anonymity, the unique identification number attributed to each survey was assigned to the data and the patient's personal details removed. Clinic staff were asked to provide information as to why surveys for individual patients were not returned. The surveys were distributed for 12 weeks: October 2012 to January 2013. Data were summarised and analysed using descriptive statistics. Qualitative information was summarised thematically.

Follow-up survey

All patients who had identified that their pain condition had affected their ability to work were sent follow-up surveys at 3 months. Forms were returned to one of the authors (I.G.) and entered on to the database. One reminder was sent to non-respondents.

Data were summarised and analysed using descriptive statistics. Qualitative information was summarised thematically.

Focus group

All patients who had expressed an interest on the survey were contacted to arrange a mutually convenient time for the focus group. Questions were developed by all authors, discussed and piloted with colleagues. The group was held in a non-clinical area of the hospital, and facilitated by one of the author (S.M.) who had not been involved in the patients' clinical care. Informed consent was obtained. The discussion was recorded and transcribed by I.K. who also took notes regarding participants' interactions. Thematic analysis was independently undertaken by I.K. and S.M., and verified by S.S. Summaries of the themes were sent to participants, inviting feedback and comments.

Writing the report

Results were summarised by each method used and then integrated in the discussion section. This is a recognised approach when using mixed-methods approach (Tashakkori and Teddlie[4]).

Results

New patient survey

A total of 320 new patients were identified by I.K., with approximately two-thirds of them being seen by the consultants, and one-third by physiotherapists. A total of 44% of the surveys were not distributed, and 10% of the surveys were not completed due to patients failing to attend clinics. A total of 148 surveys were returned: 35.8% (53/148) of the respondents were male. The age distribution is shown in Figure 1, and for comparison, the age distribution for referrals to pain consultants and physiotherapy is shown in Figures 2 and 3.

A total of 51.4% of respondents (76/148) reported to have had pain for a duration of 5 years or more (Figure 4).

A total of 69.6% (103/148) described the pain as having an impact on their ability to work (2.9% (3/103) of them were of retirement age). In all, 49.5% (51/103) of them were in full- or part-time work or education, none being self-employed. In all, 60.2% (62/103) described themselves as not being at

Figure 1. Age distribution of respondents for survey at first appointment (n = 148) and 3-month follow-up (n = 26)

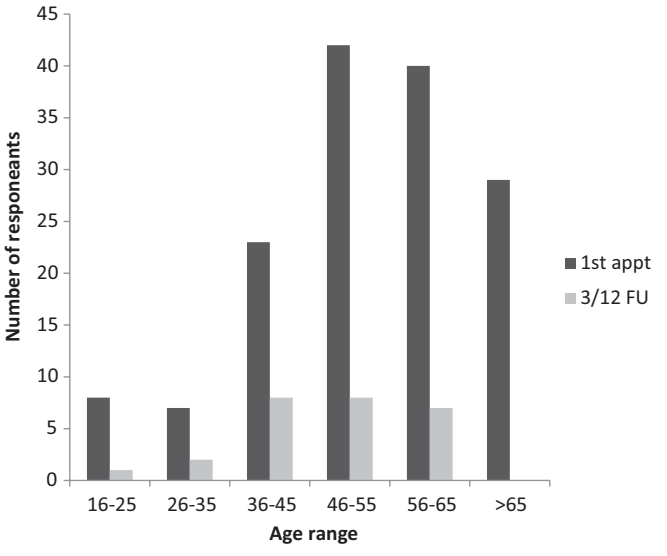
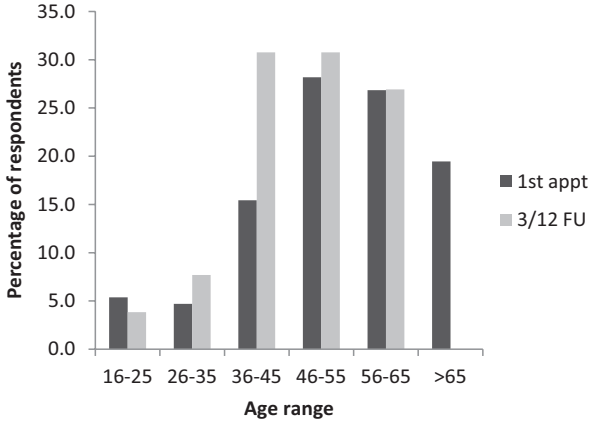


Figure 2. Age distribution (percentage) of respondents to the employment survey



work (medically retired, 'other reasons', signed off sick, unemployed): there was some inconsistency in the answering of this question with respect to whether or not their pain affected their employment, and if so, in what way, but further analysis is described in the next paragraph.

Of the patients who described that their pain problem was having no impact on training/employment, 61% (25/41) were retired, and only 10% (4/41) were in part- or full-time employment. In all, 29.3% (12/41) stated that they were signed off work, unemployed, unemployed due to other factors or medically retired.

The final part of the survey asked patients what specific help they would like to help them address their needs. Table 1 gives a summary of their responses.

The most endorsed question was 'requiring help to be more physically capable at work' and was highlighted by 53.4% (79/148) of respondents. This was closely followed by seeking 'help to *return* to work or training', with 45.9% (68/148) of respondents identifying this. The next two concerns related to effective use of medication (56/148; 37.8%) and addressing concerns about injury or damage (51/148; 34.5%). Issues relating to benefits and/or litigation were endorsed by 27% of respondents (40/148). The remaining six questions related to specific issues within the workplace, or trying to stay in work.

There were 20 comments written on the surveys, some making more than one point. These were summarised thematically (see Table 2).

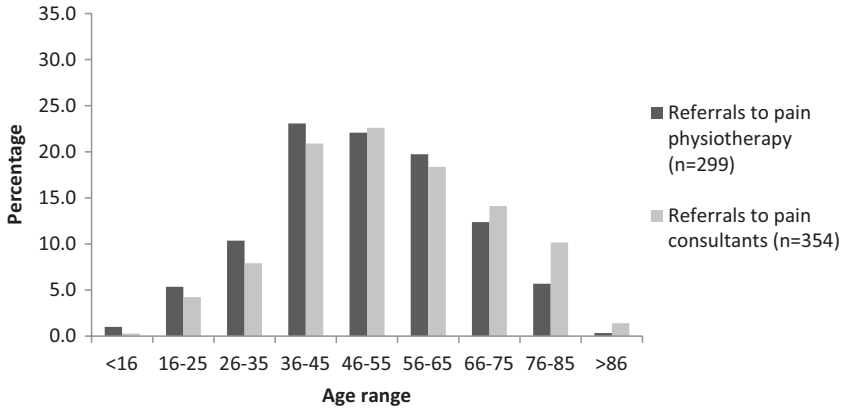
Three-month follow-up survey

A total of 148 surveys were received from new patients, with 84 of them identifying that pain was having an impact on their ability to work or attend training/education. Follow-up surveys at 3 months were therefore sent to this cohort, with 29.8% (25/84) being returned.

Age distribution of the 25 respondents is shown in Figure 1. In all, 16 respondents had seen an additional clinician, with 17 waiting to see an additional clinician. Eight patients had attended a pain management programme (PMP), with 10 reporting that they were waiting to attend one.

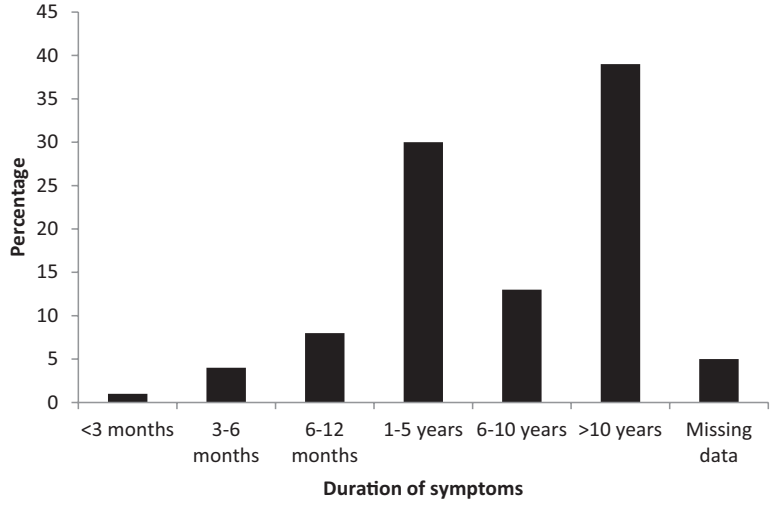
With respect to employment status, one was in full-time education, five in full-time employment, four in part-time employment and two were self-employed. A total of 10 respondents stated that they were 'signed off', and 2 were unemployed. All stated that their

Figure 3. Age distribution (percentage) of patients referred to the consultant and physiotherapy pain management services (January to June 2011)



51.4% of respondents (76/148) had had pain of 5 years or more duration (figure 4)

Figure 4. Duration of symptoms for patients returning survey at first appointment



pain was having an impact on their ability to work. In all, 40% (10/25) respondents stated that the pain management team had helped with their RTW difficulties, and 80% (20/25) respondents stated that they would like further help regarding their employment needs. The specific domains are summarised in Figure 5. A total of 15 respondents wrote a comment, with 26 items identified, covering five themes (see Table 3).

Focus group

As part of the project, a focus group was undertaken with five patients who had been seen within the pain management service. Four participants were out of work due to their pain; one was currently working, but was having difficulties staying in work. An additional participant was unable to make the focus group but emailed the team to contribute some views.

The aim of the focus group was to explore patients' views on their experience of RTW/retention-in-work issues, and to discuss ways in which these issues may be addressed.

Focus group themes

Analysis of the focus group identified three overall themes: '*Negative Perceptions*', '*Knowledge and Understanding*', and '*Problems with the System*'. Further details with supporting quotations are provided below. In addition, a number of suggestions for service improvement were provided by participants.

Negative perceptions. Participants described feeling that other people, including employers and job centre staff, may make certain *judgements* about them because of their pain condition, which may not accurately reflect their sense of their capability to work. It was felt that these judgements may be a barrier to returning to work:

> *The job centre says I'm unemployable, but I don't agree.*
>
> *I'm (seen as) an employment risk. It colours their judgement.*
>
> *I could do more now mentally, but can't do it physically, but people won't accept that. Because I walk funny and move funny … it's other people's judgements of us, it's not our judgements of ourselves.*
>
> *People who have health issues feel they will be looked at as off sick and not given a chance.*

Participants recognised that there were limitations in the work they could do and difficulties competing with other candidates who do not have similar health problems:

> *all those other people you can choose from … you're going to look for a dog with four legs, not two legs.*

Table 1. Summary of responses enquiring into patient's needs regarding employment or training needs (n = 148; % of all 'yes' responses)

Question	Yes	No	Missing data
I would like to be more physically able at work or training (e.g. to be able to sit or stand for long periods, bend, twist or to do heavy or repeated lifting)	79 (17.3)	14 (2.8)	55 (9.8)
I would like help to *get back to* work (paid or unpaid), training or education and resume my usual tasks/activities	68 (14.9)	24 (4.8)	7 (1.2)
I would like help to manage my medication better (because I don't like the side effects/I don't want to be taking it/it's not working etc.)	56 (12.3)	37 (7.4)	55 (9.8)
I would like to address concerns about re-injury or further damage at work or training	51 (11.2)	42 (8.4)	55 (9.8)
I would like help to address concerns about my welfare benefit entitlements or claims, appeals or litigation cases	40 (8.8)	53 (10.6)	55 (9.8)
I would like to have the appropriate equipment or the ability to adapt equipment at work or training	33 (7.2)	60 (12.0)	55 (9.8)
I would like help to manage my communication or relationships better with people at work or training	31 (6.8)	62 (12.4)	55 (9.8)
I would like to be better supported by my workplace or organisation	30 (6.6)	63 12.5)	55 (9.8)
I would like to have more satisfaction in my job or training	29 (6.4)	64 (12.7)	55 (9.8)
I would like to feel more secure in my job or training	27 (5.9)	66 (13.1)	55 (9.8)
I would like help to *stay in* work (paid or unpaid), training or education and resume my usual tasks/activities	12 (2.6)	17 (3.4)	59 (9.8)

Participants felt that flexible working environments would be important, taking into account the unpredictability of chronic pain.

Knowledge and understanding. Participants reported that some professionals do not have enough knowledge of chronic pain, and of conditions such as fibromyalgia syndrome (FMS): this includes GPs and staff working in job centres:

> *There's not enough understanding by GPs really of your chronic pain.*
>
> *I had to take him research about my illness, he hasn't got enough knowledge of my illness*.
>
> *Now they're just starting to get understanding of it (Fibromyalgia)*.

Participants felt that increasing the knowledge of relevant professionals (e.g. job centre staff) regarding long-term conditions, such as chronic pain is important:

> *the point is you have to change preconceived ideas.*
>
> *(the person needs to be) much more knowledgeable of people who are ill*.

Problems with the system. Participants described difficulties in finding work:

> *I have applied for 250 jobs, and not heard back from one.*

Participants also reported that government legislation and policies hinder patients in getting work. Participants expressed a concern that if they were to 'take a risk' and begin work, then it would be extremely difficult to regain these benefits should they not manage to sustain their employment:

> *My worry would be that I couldn't cope, and it would be hard to get back the benefits I had before.*

It was also reported that the benefits system does not easily take into account that patients with chronic pain can have different, but related, health problems:

> *if you have 6 or 7 different problems that overlap, that doesn't count.*

Patient participants' suggestions for service improvements. The focus group invited participants to provide suggestions for service improvements within the pain service with respect to RTW provision. These are as follows:

- It would be good to have a 'link person' working within the pain management team based in the hospital. They could be available for 'face-to-face' discussion and would have a role as a 'coordinator' or 'case worker'. This could possibly be a volunteer post, but they would need to
  i. Have knowledge of the benefits system (for form filling), jobs

Table 2. Thematic summary and examples of comments on first survey

Theme	Number of comments	Examples
Specific employment issues	8	'Normally self employed and P/T but recently moved to the area/unemployed'; 'Would like to negotiate fewer hours'
Treatment expectations	5	'I would like to have a QoL, be free of pain, be able to socialise, be able to have a family, be able to support a family'
Other health concerns	3	'Not just the knee pain but COPD, depression etc too'
Financial concerns	2	'Be able to support a family' (as above); 'Biggest impact – financial risk and incapacity to work'
Work supportive	1	'Work are supportive'
Relationship with clinicians	1	'I would like my doctor to show more concern'

QoL: quality of life; COPD: chronic obstructive pulmonary disease.

Figure 5. Number of endorsements for each of the domains that respondents felt (a) the pain management team had helped with and (b) they still wanted help with

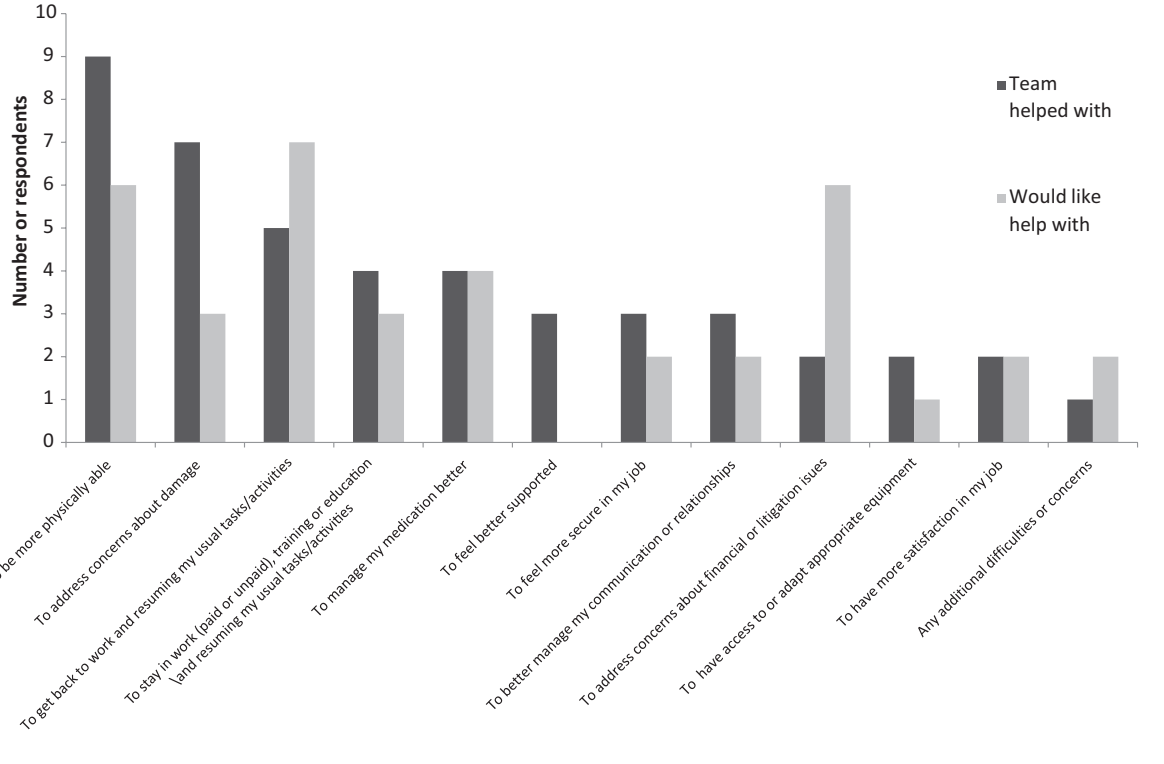


Table 3. Thematic summary and examples of comments on 3-month follow-up survey

Theme	Number of comments	Examples
Dissatisfaction with input	7	'I feel as if I've been left to get on with dealing with my pain by myself as I saw the Dr dealing with my pain management in early Nov 2012 & my next appt has been moved back to end March 13. I was given some drugs that really haven't made any difference. I hoped I would be feeling better by now to be at least able to look for work'
		'I would like to be pain free or have less pain. The Dr has been very pleasant but treatment so far hasn't made me better. My health is deteriorating. I am still waiting to start other ideas which I hope helps me start to live more easily and for pain to not be as bad'
Input helped	7	'The pain service has helped me to understand my pain and work with it … It's helped me to do little tasks at home and work out how'
		'Very positive feedback. The Pain Management Team assured me that my diseases were not "fake." They told me the "truth" that I won't get better, but will support me through this. For the first time in 2+ decades I felt like someone was listening to me and on my side. Without their support this year I'm not sure where I would be'
Awaiting further treatment	5	'Awaiting lower back injections'
Health concerns	4	'I am seeing Dr X on 27 Feb for a follow up and hopefully can talk to him about all my concerns'
		'All professionals I have seen have been sympathetic but even after an MRI I don't feel confident about ever returning to health'
Financial/social concerns	3	'Lack of paid work makes things difficult as I am solely reliant on my wife's earnings'
		'Housing issues'

market and employment sector, community and public services, including charities and the voluntary sector;

ii. Crucially, they would need to have some knowledge of pain and medical conditions;

iii. Be able to access patient records to have a bigger picture of the patient's needs;

iv. Be able to liaise with patients' employers or human resources and be an advocate for patients, so that they can be supported to stay in work.

- It would be good to offer patients work experience in work placements or volunteer jobs, particularly within the hospital. It was felt that these should be 'challenging jobs', not just low-skilled placements. A more supported and gradual RTW scheme is needed with interaction with prospective employers.
- The PMP was useful, but more emphasis should be placed on RTW issues.
- Pain team members need to give more guidance about how patients can get help and what services are available, as patients tend to feel they have to find things out for themselves.

Discussion

Although a statistical analysis was not undertaken, Figures 2 and 3 indicate that the patients completing the first survey represented the age demographics of patients seen by pain management physiotherapists and doctors. As would be expected, there was a higher response rate for people in the 36–45 years age range, with no one over the age of 65 years responding to the 3-month follow-up. In all, 60.2% (62/103) described themselves as being off sick: this may be high due to a bias of patients who chose to complete the survey and had work-related difficulties.

Over two-thirds of respondents from the initial questionnaire reported that their pain was having an impact on their ability to work: of concern, 60.2% (62/103) of them described themselves as not being in work. Considering that just over half of all of the respondents described having had their pain for five or more years, this cohort of patients are potentially going to be very difficult to re-engage with the job

market (Waddell[5]) particularly at a time of lowered job opportunities: it is likely that specialist support would be required (Wright[6]). This was endorsed within the focus group discussion where participants proposed that there should be a 'link person' involved in their care: someone who understood their chronic pain problem but was also aware of benefits entitlements (especially in the context of concerns about RTW trials) and issues such as employers' expectations of a graded RTW. These issues are discussed in more detail later on.

In the first survey, there were four additional comments which related to treatment expectations (e.g. symptom relief or resolution), with three identifying additional health concerns and one respondent expressing dissatisfaction about their doctor. At the 3-month follow-up survey, 7/26 comments related to dissatisfaction with their medical care, and 7/26 provided positive feedback, and there were four comments related to ongoing concerns about their health problem. These will be highlighted to the clinical teams.

The main theme from the comments on the first survey focussed on 'specific employment difficulties' with two respondents highlighting specific 'financial concerns'. Clearly, these would be beyond the remit of health-care professionals to address, but arguably, to maximise 'recovery' from a health problem, they would need to be dealt with. Of concern is that only one respondent described a positive situation with the workplace. Interestingly, there were no employment-focussed comments on the 3-month survey, with only three comments relating to 'financial or social concerns'. However, with the fixed-response answers, although 40% (10/25) stated that input from the pain team had helped to address their vocational issues, 80% (20/25) indicated that they needed additional support. This is in concordance with a qualitative study by Coole et al.,[7] which showed that there was little evidence that GPs or other clinicians were able to effectively manage employment difficulties for patients with low back pain. The most endorsed questions for help that had been provided were the following: enabling patients to be more physically able at work (36%: 9/25) and providing reassurance about damage (28%: 7/25). When enquiring what input was *still required*, the domain for fitness remained about the same (24%: 6/25); although patients were still on treatment and there was still a potential for this to be addressed, it may be valuable for the team to reflect on this feedback. However, in terms of requiring reassurance about damage, this endorsement had dropped to 12% (3/25).

With respect to *what* input was still required, help to get back to/stay in work (28%: 7/25) and to address concerns about financial or litigation issues (24%: 6/25) were the most endorsed responses. These two domains had also been identified at the first appointment: 45.9% (68/148) and 27% (40/148), respectively. Again, this would be beyond the skills of a health-care professional to address, but would be in the domain of a vocational advisor. However, as identified in the focus group, patients raised concerns about 'negative perceptions': being 'unemployable'; being at an 'employment risk'; or that people with health problems 'should not be given a chance'. Paradoxically, the stress of worrying about these perceptions (and therefore potentially working even harder to compensate for them) could, in itself, make it more likely that pain sufferers *do* go off sick or perform less effectively. These perceptions of patients are also in line with previous research (Coole et al.[8]).

Participants expressed frustration that job centre workers and health-care professionals do not have enough 'knowledge and understanding' about chronic pain conditions, and so cannot provide appropriate support (Coole et al.[8]). These issues, alongside frustrations about 'problems with the system' (complexity of the benefits system, lack of response to applications) make the whole process precarious. However, participants were also asked to make suggestions for 'service improvements'. The conclusion of these discussions was that there should be a 'link person' who could work across the chronic pain and vocational/employment services (Wright et al.[3]), in effect, acting as an advocate for the patient. It was emphasised that the link person should understand the medical complexity of the health problems, be able to access notes and discuss cases with clinicians, employers and human resource departments. Clearly, this would be a new way of working and would require specialist training and supervision, especially around issues pertaining to confidentiality – yet, this could provide a pivotal role in enhancing the rehabilitation of a cohort of patients with complex needs.

It was also proposed that there could be work placements established within the hospital to help build confidence and experience in what could feel like a more 'safe' environment. As there are already schemes across the trust to support people in gaining work experience, this may be a viable area to explore and would merit further enquiry.

Strengths/weaknesses of the survey evaluation

Despite best efforts, there was poor engagement with the survey process, although it does seem that the respondent sample represented the age distribution of the new patient referrals to the pain team. However, the response rates for both surveys were around 30%, which was recognised as being an acceptable level. Follow-up times were originally set at 3 and 6 months. Due to

poor response rates, it took longer than planned to distribute the questionnaires, and so only 3-month data were acquired. This meant that none of the respondents had completed their treatment which may have affected their view of the service.

Significant effort was made to ensure that a non-clinical research assistant was involved in the distribution of questionnaires and collation of data to minimise the risk of bias. Similarly, the focus groups were run by staff not involved with participants' care.

Conclusion and recommendations

Employment or financial/litigation difficulties need to be considered in the context of patients' health problem, and yet chronic pain is a complex, and often misunderstood condition. Reassuringly, there was overall positive feedback regarding patients' clinical experience, indicating that although there may be a shortfall in the level of physical rehabilitation for work, patients were being reassured about their structural integrity for work. However, there was frustration around lack of reciprocal attitudes, information and knowledge held by health-care professionals and vocational advisors, which are required to support people with complex health and employment needs. In accordance with previous research, it was proposed that this could be addressed by employing a 'link' person who would have the ability to cross these domains and also act as the patients' advocate. This was particularly relevant in the context of patients being keen to explore ways of returning to work, but having anxieties that they would lose benefits should this be unsuccessful.

Trialling the employment of a 'link' person to work across health and vocational issues could be part of a research project but would require careful planning and support to ensure adequate provision of funding, training and supervision. It could also be an opportunity to explore the delivery of an innovative but integrated model of care designed to support some of the most complex patients seen within the pain service.

References not printed but can be obtained from the author by email.

Informing practice

Why not a career in Pain Medicine?

The British Pain Society

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SAGE

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Specialising in Pain Medicine is a potential career option for every anaesthetic trainee. The current training consists of four steps: Basic, Intermediate, Higher and Advanced. The first two modules are compulsory and part of the curriculum, and the latter two are optional and for those who wish to sub-specialise in chronic pain. The expectation towards anaesthetic trainees is to be familiar with the treatment of acute pain and have an understanding of issues around chronic pain, and relevant procedures.[1] The point in their career where trainees decide to specialise in chronic pain often needs to occur at the level of ST3 or ST4 so that provision for the higher training modules can be put into place in years ST5 and above.

In our region, London and Kent, Surrey and Sussex (KSS) Deanery, we have noticed consistently low numbers of trainees wishing to pursue a career in pain management. Advanced pain training posts are often under-subscribed, and a similar conclusion was drawn by the UK-wide national pain audit, although there does appear to be some regional variation.[2] In the light of this, we aimed to carry out a small survey to find out what may be the reasons that junior specialist anaesthetic trainees (ST3/ST4) decide not to pursue pain training.

A pre-formatted, anonymous, scannable survey, consisting of five questions was distributed to a group of ST3-/ST4-level anaesthetic registrars attending a regional cancer study day at a local hospital. The survey consisted of two main parts. In the first part, the exact training level and experience gained in the field of Pain Medicine were identified, using multiple-choice questions. This was intended to allot the right group of trainees and set the context of experience in pain for the second half of the survey. Then, trainees were asked to give free text answers about their career choices and the reasons why they decided *against* Pain Medicine.

Of the 29 participants, 23 completed the survey, which was a 79% compliance rate. Of the 23 responders, 3 were core trainees. Out of the target group of 20 ST3-/ST4-level anaesthetic registrars, 3 were ST4s and 17 were ST3s.

In terms of exposure to Pain Medicine, 17 out of 20 trainees had experience in intermediate pain training. Two of the ST4s and one of the ST3s had finished their intermediate pain training at the time of the survey. One ST4 and 13 ST3s had their module in progress. Three ST3s had no intermediate training started at the time. The survey found variable amounts of experience among the surveyed trainees (Table 1).

The second part of the survey explored career choices. Of the 20 trainees, 9 (45%) have already made a decision on their sub-specialty. All 3 ST4s and 7 of 17 (35%) ST3s answered as follows:

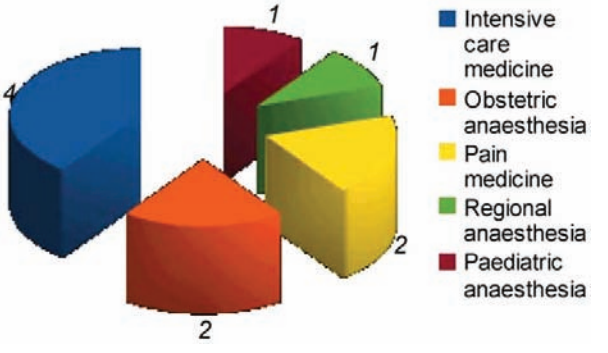

Table 1. Trainee experience reported

	Finished module	Module in progress
Acute pain rounds	2 – 4	0 – 1
Chronic pain clinics	10 – 20	0 – 10
Theatre lists attended	10 – 30	0 – 15
Procedures performed	20 – 180	0 – 20

On the question of why they have not chosen Pain Medicine 2 of 3 (66%) ST4s and 10 of 17 (58%) ST3s gave a response. There was usually more than one type of statement as response. The responses with their frequencies in brackets are as follows:

- Interested in something else (7);
- Not interested in Pain Medicine, but no other preference (5);
- Clinics are difficult/uninteresting/unfulfilling (4);
- Not enough exposure to Pain Medicine as yet (3);
- Not enough exposure to other anaesthetic sub-specialities to decide (1);
- Doesn't feel trained in managing personality/psychological issues (1);
- Preference of variety of theatre work of generalists (1).

Discussion

Although this is a small survey, helpful information was attained from the views of these trainees and the importance of their exposure to Pain Medicine. It seems that all ST4s, who have attended this study day, have already decided on their sub-specialisation and so did seven of the ST3s. Although the number of participants is small, this might give a suggestion of the importance of the ST3 year in the training programme. The ST3 year is often the year in which trainees have their first experience of chronic pain work. It is therefore important that this exposure is engaging in order to entice trainees into this sub-speciality for the rest of their professional career. The National Pain Audit highlighted the current situation that trainee exposure to Pain Medicine is lacking, and this contributes to a lack of interest. This might be bolstered through educational events[3] specifically for junior anaesthetists but also by the introduction of pain teaching in the undergraduate curriculum.

There are some uncertainties about the future of the speciality centred around commissioning. These are being addressed by meetings held all around the United Kingdom, and many commissioning issues are being dealt with by the implementation of the British Pain Society's (BPS) pain patient pathways.[4] Interestingly, in our survey, these issues appeared unfamiliar or not a matter of concern to the junior group, as there was no mention about these in their responses.

Conclusion

Basically, there have been two groups among trainees:

- Decided against pain and may or may not have developed a different interest;
- Decided for pain or at least remained open about it, calling for further experience and training.

Among those who completely refused Pain Medicine, disinterest and clinic work were the main deterrents. The reasons given for this were clinics being difficult and unfulfilling, despite the reported overall improvement in general patient condition in the 70.6% of clinics.[2]

Interpersonal skills used in daily anaesthetic work show a great difference compared to that needed in treating chronic pain, and this seemed to be acknowledged by some of the juniors and was either deterrent or at least a recognised weakness. Hence further training in the daily dealings with this patient group, or more widely the chronically ill patient group, could increase trainee's interest in the field, especially techniques related to clinic work. The experience trainees get during the ST3/ST4 years appears to be crucial in their choice of sub-speciality. Presentation of the subject might be a reason why trainees did not find it interesting, despite the management of pain being an intellectual challenge, requiring work in a stimulating, fast developing multidisciplinary environment, with a good amount of successful treatment options.

The field of Pain Medicine is full of opportunities in the theatre, clinic and laboratory environment, backed by a buzzing scientific and social background, which makes it a rewarding choice of career. Hopefully, more trainees in the future will recognise this and choose Pain Medicine as a career.

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Informing practice

Dealing with DNAs

The British Pain Society

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SAGE

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National Health Service (NHS) has been going through some tough times. Among others, a difficult financial situation is probably on top of the list. There is a real need for us to look into every area of our practice to make it more efficient so that we provide optimal care to our patients and make sure that the money spent is maximally utilised. Pain clinic appointments like any other outpatient appointments are an important part of our service. We have a duty to audit our pain clinic attendances so that we recognise any problems and explore the options to help and improve our performance.

One of the problems that we face in our outpatient clinics is of missed appointments or Did Not Attends (DNAs). The Department of Health report[1] for 2011/2012 showed that in England, for around 53 million appointments made, 5.5 million *Did Not Attend*, making the percentage of DNAs around 10%. This rate was different for different regions:

England	10.31%
North East	10.01%
East Midlands	9.16%
West Midlands	10.63%
London	14.18%
South West	7.51%

There was a reduction of DNAs by 250,000, but still more than acceptable. Some regions are still witnessing a rise.[2]

Problems caused by DNAs

The financial loss to NHS could be huge. It is estimated that the loss was around £600 million in the year 2007/2008[3] and probably cost £800 million in 2011/2012.[4] This has prompted an outcry in the media with one report suggesting that the money lost was equivalent to 1% of health budget, and could have covered the cost of a new hospital or paid for 115,000 hip replacements or 110,000 heart bypass operations.[4]

The vacant slot in appointments obviously means delayed care for people who could have been offered those slots. This will lead to longer waiting lists and pose problems for hospitals in meeting the 18-week referral to treatment target. Doctors' and nurses' time in clinic is naturally wasted. It also puts pressure on administrative staff if they have to rebook those patients for another appointment. This may lead to frustration among hospital staff. GPs will also have to bear the brunt of re-referring. A hospital/trust with high DNA rate would lose some of its efficiency, and this may impact its reputation and ability to provide good service.

Reasons for DNAs

There have been some studies to look into the reasons why patients do not attend their appointments. Young males are more likely to miss an appointment than older patients. Patients who are socially deprived have higher rate of DNA.[4] Few studies and surveys done in the United Kingdom list more practical reasons for DNA.[5–8] Simply forgetting their appointment was on top of the list. Other factors that increase DNA are clerical errors, time of appointment, distance to travel, appointment no longer needed, childcare and so on. Some of the hospital factors[7] that can increase DNA rate are difficulty in cancelling appointments, short notification, poorly designed appointment letter and lack of organisation of clinics.

What could be done to reduce DNAs

Hospitals can use several strategies to bring down the DNAs. Some of which are[7]

- Making appointments only when it is necessary;
- Good and clear communication with patients;
- Easy to cancel appointments;
- Partial booking;[9]
- Choose and book;
- Patient reminders;
- Education.

Patient reminders

Using some kind of patient reminder is an easy and cost-effective way of reducing DNAs. A letter could be sent one week before the appointment. Although sending letter may not be very effective, it is probably better than nothing. Several hospitals have used telephone calls as reminders. These calls could just be a reminder or an interactive service which allows patients to confirm, cancel or rebook appointments. This has been shown to reduce DNA rate significantly.[10–13] Mobile phone text messages may be one of the simple, effective and cheaper ways of reminding patients of their appointments.[14] A Cochrane review[8] on mobile phone

messaging reminders concluded that text messaging reminders increase attendance at health-care appointments. They are better than postal reminders and as good as phone reminders. The costs per attendance of text messaging are lower compared to phone call reminders, making them more cost effective. One of the examples of successful implementation of patient reminder systems is in Portsmouth Hospitals NHS Trust. By using automated texting and voice messaging, they have reduced the DNA rate by over 60%.[14] There are systems available in the market that could be integrated into existing NHS administrative systems to generate patient reminders.[15]

Patient education

Bringing awareness among patients about the importance of keeping or cancelling their appointments will certainly reduce DNAs. There have been several campaigns[16,17] towards this but more needs to be done.

Penalty

Penalising patients who miss their appointments is a contentious issue as vulnerable and sick patients may be affected.[18] It may also be difficult practically to implement any such measures.

Summary

The rate of DNA in outpatient clinics in NHS continues to be a problem. There are several reasons for patients to miss an appointment. Forgetting an appointment is a common reason for DNA. This could be tackled by using simple and cost-effective measures like text messaging services. Educating patients regarding importance of not missing an appointment is probably more effective and practical than any attempts to impose penalty on those who DNA.

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Informing practice

Lumbar epidural adhesiolysis by Racz catheter technique

The British Pain Society

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SAGE

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Neuropathic pain secondary to the presence of lumbar epidural adhesions is a common problem presenting in the pain clinic. Lumbar back and/or leg pain from epidural adhesions may follow spinal decompression surgery, but may also be the result of annular disc tear or infections such as bacterial discitis. Filmy, collagenous adhesions develop in the epidural space, resulting in tethering of nerves, increased neural tension and neural strangulation.

Interventional techniques, such as epidural and selective nerve root steroid injection, are commonly used, alongside nerve pain medications such as the tricyclics and anti-epileptics. Opioids are often added, even at high doses. Significant pain may persist despite such prescribing, and patients are often beset with side-effects.

With this in mind, we have recently adopted Racz's minimally invasive technique of percutaneous lumbar epidural adhesiolysis (PLEA), which can be performed via caudal, inter-laminar or transforaminal routes. We have concentrated on the caudal epidural route, which we discuss here. For us, PLEA has proven to be a useful technique, alongside the multidisciplinary pain management of patients with lumbar epidural adhesions.

PLEA is a technique that was developed to mechanically break up epidural adhesions with the use of soft-tipped wire-bound catheter, placed commonly in the ventro-lateral epidural space at the site of adhesions along the exiting nerve root. Local anaesthetics and steroids are delivered to the target area, while adhesiolysis is performed with hypertonic (10%) or normal (0.9%) saline, with or without hyaluronidase. PLEA is not carried out in majority of pain clinics in the United Kingdom, and at present, only a few patients have access to this minimally invasive and potentially useful intervention.[1]

We suggest that Racz PLEA may be carried out safely and effectively in most pain clinics in the United Kingdom where intervention treatment is carried out, given the relative ease of acquiring the necessary skills by observation and one-to-one teaching, its safety and efficacy and low start-up costs.

Clinical background

Persistent low back and radicular leg pain caused by intervertebral disc herniation, spinal stenosis and spondylolisthesis is the most common reason for lumbar spinal surgery. However, chronic back and/or leg pain may start after technically successful spinal surgery, often after an interval, and persist beyond 6–12 months. Extent of peridural scarring is directly related to recurrence of radicular pain post lumbar laminectomy.[2] Symptoms related to epidural adhesions commonly include back and/or leg pain, while some patients also experience weakness and sensory or muscle spasms in the limbs, numbness and possibly, bladder and bowel difficulties.[3,4]

This syndrome is not an uncommon problem, and one recent UK survey quotes the incidence at around 10%–40%.[1] This is commonly termed as 'failed back surgery syndrome' (FBSS), but in our view, the term 'FBSS' has negative connotations, which can create confusion in the minds of patients and clinicians alike, implying that surgery was somehow badly carried out, adding to the burden of uncertainty that the patient already carries. For this reason, we prefer to use the term 'post lumbar surgery syndrome' (PLSS), now commonly used in North America.

Patients with PLSS have a poor quality of life and secondary psychological problems and are therefore frequent users of the health service. Managing persistent pain in this group of patients is often challenging. Secondary open surgery for removal of epidural scarring also has limited success with long-term benefit seen only in a small number of patients.[5,6] Epidural steroid injection and selective nerve root blocks are the most common interventions performed for PLSS. Epidural steroid injections do not prevent formation of epidural adhesions[7] and only provide a short-term improvement in pain and function for up to 2 weeks.[4]

Epidural adhesion formation is common after lumbar surgery, and an important cause of PLSS, and should be considered, alongside differential diagnoses such as recurrent disc

herniation, spinal stenosis, ligamentous disease, facet and sacroiliac joint disease, adjacent segment disease and so on which should all be excluded.[2] Epidural fibrosis may also develop secondary to annular tear and leak of nuclear material, disc inflammation or infection and the presence of blood in the epidural space.[8] Epidural adhesions may also contribute to the pain of degenerative spinal canal stenosis in an increasing ageing population, especially when simple epidural steroid injection has not sufficed. Micro-bleeds are thought to occur in the extensive venous epidural plexuses caused due to the encroachment by surrounding structures such as discs, facet joints and ligaments.

Patients with epidural scarring are three times more likely to develop recurrent radicular pain.[2] Nerve roots encased in such adhesions may be tethered by them, resulting in increased neural tension preventing neural glide during limb and spinal movement (positive 'slump test', and femoral and sciatic stretch tests). There may also be strangulation of the nerve root: restriction of arterial supply and venous return, and also reduction in nutrient and axoplasmic transport, all of which may increase neural irritability.

Repeat magnetic resonance imaging (MRI) is commonly performed in this group of patients to evaluate recurrent problems after surgery.[1] However, non-contrast MRI scan may fail to demonstrate epidural scarring. Gadolinium with diethylene triamine penta-acetic acid (Gd-DTPA)-enhanced MRI scans may be useful in diagnosing epidural adhesions and differentiating them from recurrent disc herniation.[9] However, the filmy adhesions discussed here may not become apparent on even the most detailed of MRI. Instead, they may be demonstrated by radio contrast epidurography carried out under fluoroscopy, as a prelude to the Racz catheter procedure, with adhesions identified as filling defects.[6]

Racz catheter technique

PLEA was developed by Dr Gabor Racz and Houlbec in 1989 in Boston, as a 3-day procedure, which was then modified by Manchikanti et al.[8] to a 1-day procedure. Manchikanti et al. have not found a significant difference when 3-day epidurolysis procedure was compared to 2-day and 1-day procedures.[8,10] The same group also found, more than 50% pain reduction in 90% and 72% of the patients at 3 and 12 months, having three to four 1-day PLEA procedures over a 12-month period, compared with 35% and 12% of patients in caudal epidural group, having 2–3 caudal epidural steroid injections during the same period. The PLEA group also had an average 40% improvement in function at 12 months, compared to 13% in the caudal epidural group.[4]

Veihelmann et al.[11] compared 1-day adhesiolysis to physiotherapy. The physiotherapy group showed no significant change in leg Visual Analogue Scale (VAS) at 3, 6 and 12 months, while in the adhesiolysis group, VAS reduced from 7.2 to 2.4 at 3 months and stayed at 2.8, at 12 months. Hypertonic saline is commonly used for adhesiolysis and neurolysis during PLEA procedures, and Manchikanti et al. showed more than 50% pain reduction in 72% patients in a hypertonic saline group compared with 60% in a normal saline group. The duration of pain reduction was also longer: 3.8 versus 2.8 months.[8]

Possible complications of PLEA

Dural puncture is the most common complication reported, at around 2%.[4,11] One consequence of dural puncture is that local anaesthetic or, worse, hypertonic saline could enter the subarachnoid space, resulting in a spinal block or neural damage, respectively. Arachnoiditis following epidural adhesiolysis with hypertonic saline has been attributed to unrecognised subarachnoid entry of hypertonic saline. With this in mind, we do not currently use hypertonic saline for PLEA. Catheter shearing has been reported. The catheter may shear, while advancing the R.K.™ needle, particularly if the stylet is not inserted fully. There have been case reports of transient radicular neurological deficit after PLEA. No clear causes have been identified. There are case reports of spinal infection, with patients developing epidural abscess and meningitis.

Systemic steroid effect are well known, we are especially worried about raised blood sugar levels and adrenal/hypothalamic–pituitary–adrenal (HPA) suppression. A study done here at the Royal Free, had demonstrated high levels of triamcinolone, sufficient enough to cause HPA suppression, in the blood up to 9 days post transforaminal epidurals.[12] No cases of epidural haematoma have been reported. There are no case reports of serious neurological deficit after adhesiolysis, including paralysis, weakness or bladder and bowel dysfunction.[13]

Our method and audit of outcomes

One of us (R.K.K.) was fortunate enough to have been taught this procedure by Dr Gabor Racz, and incorporated Racz PLEA into his practice here at the Royal Free, as an additional interventional technique, for managing patients with suspected epidural adhesions, who have failed to respond to standard treatments. We implement the modified, 1-day protocol as described by Manchikanti and others, which R.K.K. has taught us here. We have audited our current practice of PLEA procedures performed over 18 months between January 2011 and July 2012. Data were collected retrospectively from patients' notes, outpatient clinic letters and telephone reviews. We documented percentage reduction in pain, improvement in function following PLEA, as reported by the patients, and sought information regarding adverse effects.

Procedure

All procedures are performed in the operating room, under appropriate aseptic conditions, using fluoroscopy. We established intravenous access, giving conscious sedation as required. We applied local anaesthetic to the caudal injection site. The epidural space was accessed via caudal route (sacral hiatus) using a specially designed 16G RX *Coudé* epidural needle (Epimed) under fluoroscopic guidance. Lumbar epidurogram was carried out using 2–5 mL of iohexol contrast-medium (Omnipaque-240), with adhesions identified as filling defects along course of nerve roots. Additionally, absence of intravascular, subarachnoid and subdural spread of contrast was confirmed.

The Racz catheter, a spring-guided reinforced catheter, is passed through the *Coudé* needle to the site of filling defect or the site of patient's pathology as determined by the dermatomal level of the patient's symptoms, and by investigation (MRI) findings (Figure 1). Following placement of the catheter, mechanical adhesiolysis is carried out by movement of the catheter, and by injecting small aliquots of 0.9% saline with or without hyaluronidase.

Following adhesiolysis, a repeat epidurogram is carried out, successful adhesiolysis being confirmed by the spread of contrast material along the nerve root (Figures 2 and 3), with filling in of the ventro-lateral epidural space. In all, 3–6 mL of mixture of 1% lidocaine with triamcinolone 40 mg is delivered at the target area.

Following completion of the procedure, needle and catheter are removed, and a bio-occlusive dressing is placed. The catheter is checked for any damage and for intactness.

Patients are observed in the recovery room, and discharged home when recovered, with appropriate aftercare instructions and contact information.

They are then encouraged to move freely and to stretch the limbs, and flex and extend the spine, and if possible attend for physiotherapy, hoping to further stretch and break down epidural adhesions.

Figure 1. Racz catheter in the sacral epidural space

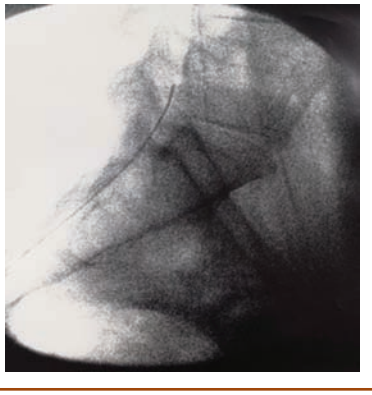


Figure 2. The X-rays shows a filling defect. One can also see a vascular runoff of contrast

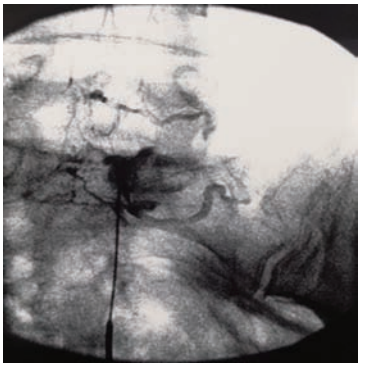
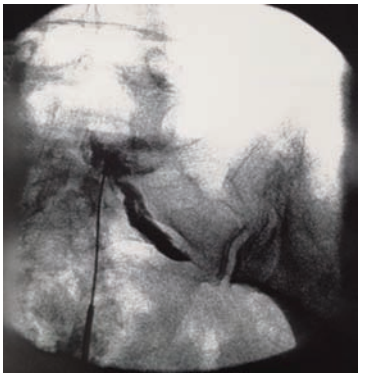
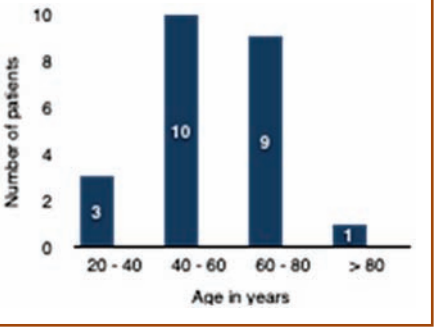


Figure 3. Post-adhesiolysis contrast spread outlining of S1 nerve root



Our results

Graph 1. Age distribution



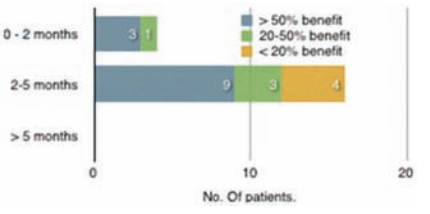
15 men and 8 women were treated with percutaneous lumbar epidural adhesiolysis (PLEA);

Age distribution is shown in (Graph 1);

23 patients had 27 procedures;

20 of 23 patients had previous surgical spinal decompression.

Graph 2. Duration and quality of pain reduction

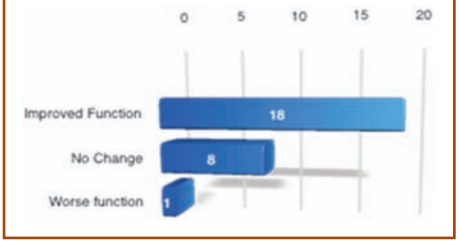


Of the 27 procedures performed, 20 procedures (74%) were beneficial;

44.4% of the patients had > 50% reduction in pain (Graph 2);

74% patients had some benefit (pain reduction), while in nearly 60% patients, the benefit lasted from 2 to 5 months (Graph 2).

Graph 3. Post-adhesiolysis changes in activity levels



66.7% patients reported improvement in function;

Only one patient reported worsening of pain by 2 points (20%), and reduced activity levels (Graph 3);

There were no other complications reported.

Conclusion

There is fairly good evidence, that Racz catheter PLEA is a safe and effective intervention in relieving low back and leg pain in patients with PLSS, when more simple approaches have failed. The procedure may need to be carried out repeatedly three or four times for maximum effect. PLEA provides relief to patients who have no other option other than implantable neuromodulation devices, or secondary surgery, which is unlikely to be beneficial.[3,13]

We feel that Racz catheter PLEA has certain advantages over epiduroscopic epidurolysis in terms of capital outlay and the ease of acquisition of the necessary clinical skills. We are not recommending it as a first-line treatment, and we strongly feel it should part of the multimodal approach.

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Informing practice

The British Pain Society

Pain News
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SAGE

The effect of capsaicin 8% patch in patients with peripheral neuropathic pain following surgery. A case report study

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Chronic pain of moderate to severe intensity occurs in 19% of adult Europeans, seriously affecting the quality of their social and working lives[1] and is a substantial health-care problem. Persistent pain following surgery has been extensively investigated to find out any predictive risk factors and its possible prevention.[2,3] The prevalence of prolonged pain is experienced by many patients (10%–50%), with an extreme variability between studies, according to comprehensive review of the French and English medical literature from 1998 to 2013.[4] The incidence of severe persistent localised pain after surgery reduces to 5%–10% of patients,[4] but was found to be present in approximately 30% of patients one year after knee arthroscopy.[5]

Topical cream with capsaicin is used to treat peripheral neuropathic pain. Following application to the skin, capsaicin causes local desensitisation after repeated applications. The high-concentration (8%) capsaicin patch was developed to increase the amount of the compound delivered and is given as a single application to the affected area. The benefit lasts for 12 weeks approximately, according to a systematic review of clinical trials.[6] The higher concentration of topical capsaicin resulted in higher levels of pain relief than the lower concentrations of capsaicin,[6] although the benefit was not statistically significant. It is important to note that patients achieving pain reliefs also improved their quality of life, sleep, depression and fatigue.[6] The efficacy of capsaicin patch 8% is similar to other therapies used for chronic pain and is suggested to be used when other available therapies have failed;[7] it is one of the few neuropathic pain treatments which have been successfully translated from basic bench research to human treatment.[8] It is a highly selective agonist for the transient receptor potential channel vanilloid-receptor type 1 (TRPV1), which is an ion channel receptor complex found on central and peripheral terminals of nociceptive primary sensory neurons.[9] When capsaicin is applied locally, it initially enhances and stimulates the TRPV1-expressing cutaneous nociceptors, which may be associated with painful sensation. This is followed by denervation of the peripheral terminal of TRPV1-expressing neurons in the epidermis in a highly selective manner, resulting in hypoalgesia.[9] It also reduces sensitivity to heat and sharp pain stimuli.[9] Over a few months after the application, a re-innervation of the treated area with TRPV1 takes place and, consequently, the pain comes back.[9]

Topical capsaicin has been found to be effective in the management of painful diabetic neuropathy, often in conjunction with antiepileptics and antidepressants.[10,11] In general, combination therapy, rather than monotherapy, has shown more positive response in the management of neuropathic pain.[12] No information is currently available in literature about the effectiveness of topical treatment in persistent localised pain following surgery.

Table 1. Demographic data

- All patient treated: 23
- 12 female, 11 male
- Average age 47.5 (24-86)

Table 2. Areas of neuropathic scar pain

Patient	Sex	Age	Location of Pain
1	Female	27	Left elbow
2	Female	57	Left leg
3	Female	65	Left mid thoracic back
4	Female	86	Central lower abdominal (post-hysterectomy)
5	Male	41	Left ankle
6	Male	59	Right foot
7	Female	51	Right lower abdominal (post-hernia)
8	Female	47	Right upper thoracic back
9	Male	38	Right leg pain
10	Male	45	Left breast (post-mastectomy)
11	Female	36	Right foot
12	Male	53	Right knee
13	Male	42	Left foot
14	Female	41	Right hand/wrist
15	Female	68	Left pelvis
16	Male	24	Left arm
17	Male	29	Right ankle and foot
18	Female	35	Left foot
19	Female	41	Left hand/wrist
20	Female	29	Left back scar
21	Male	74	Right foot
22	Male	50	Abdominal scar
23	Male	56	Left leg scar

Methods

We treated 23 consecutive patients suffering from localised chronic neuropathic pain (more than 6 months) following surgery (Table 1) by applying capsaicin patch 8% accordingly with the agreed methodology over the painful area of the skin.[7] They were 12 female and 11 male patients, and the average age was 47.5 years (Table 2). The pain score was measured by the Visual Analogue Scale (VAS) (0–10) at baseline, 1-month follow-up and at 3-month follow-up. One patient was lost to follow-up, and hence, the study was concluded with 22 patients.

Results

A total of 11 patients reported some to very good improvement at the 3-month follow-up, and 11 reported insignificant or no improvement. At the 1-month follow-up, a higher number of patients (16) reported some to very good improvement compared to the 3-month follow-up (Figures 1 and 2). One patient dropped out, and data were not available at follow-up. The mean numeric rate score (0–10) of the 22 patients completing the study was 8.36 at baseline, 6.04 at 1-month follow-up and 6.86 at 3-month follow-up. The average degree of VAS improvement was 2.32 at 1-month follow-up and 1.50 at the 3-month follow-up (Table 3 and Figure 3). The mean ± standard deviation VAS for 22 patients in the treatment group changed from 8.36 ± 0.71 at the beginning of treatment to 6.04 ± 1.58 at 1 month and to 6.86 ± 1.39 at 3 months (Table 3 and Figure 3). Among the patients who did improve, four reported >50% pain relief at 1-month follow-up and one at 3-month follow-up. No side effects or serious adverse reactions were reported.

Table 3. Mean and standard deviation for VAS

	Mean VAS	SD VAS
Baseline	8.36	0.71
1 month	6.04	1.58
3 months	6.86	1.39

VAS: Visual Analogue Scale; SD: standard deviation.

Figure 1. Individual patient pain relief at 1- and 3-month follow-up

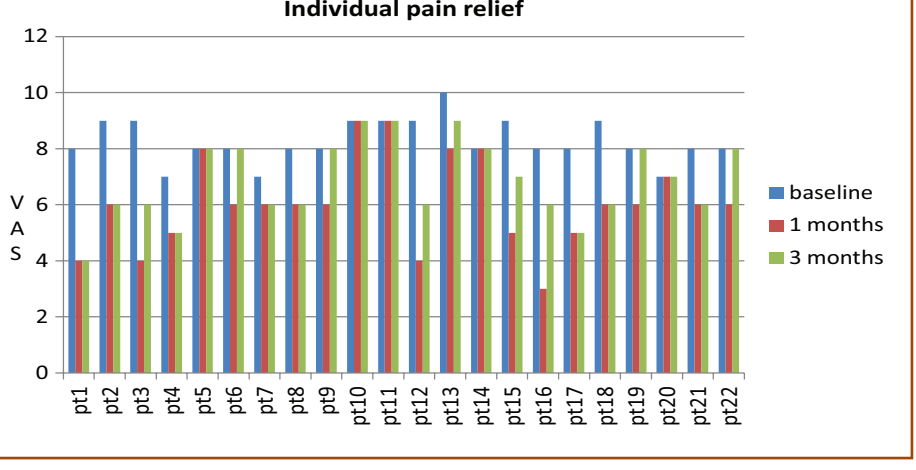


Figure 2. Outcome at 1- and 3-month follow-up

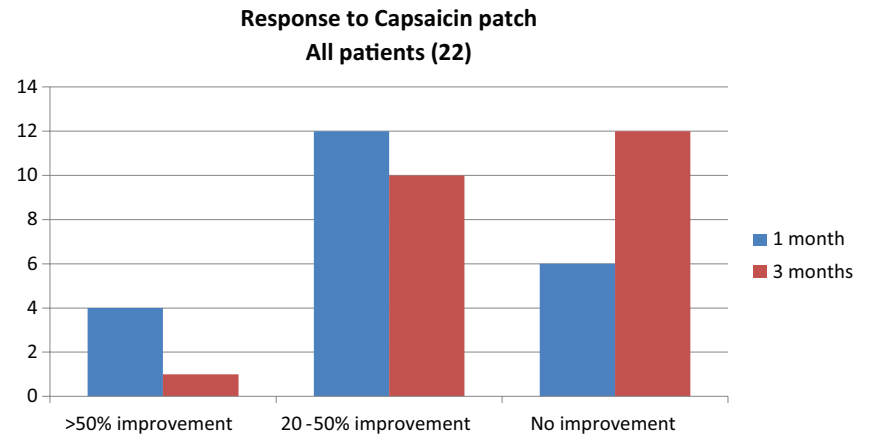
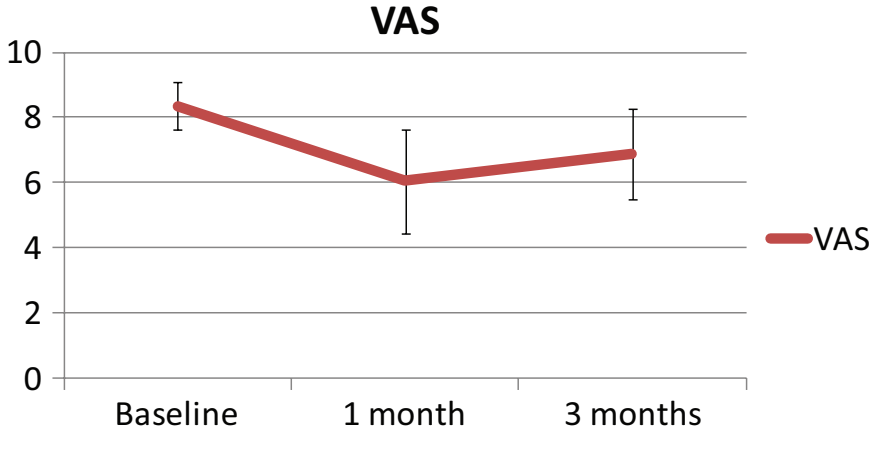


Figure 3. Mean and standard deviation of pain scores at baseline, 1 month and 3 months



Conclusion

In our prospective study of 23 consecutive patients, the application of capsaicin patch 8% as a treatment for localised neuropathic pain following surgery showed a beneficial effect in half of the patients treated; however, the effect was shorter than expected, reaching the best results at 1 month with the benefit partially fading after this. Importantly, no side effects were reported, apart from temporary localised erythema and hyperaesthesia in few patients, which lasted up to 3 hours and did not require any specific therapy. We believe that a randomised control study should be organised in order to confirm these preliminary data.

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Assessment of outcomes after interventions – the Glasgow story

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The British Pain Society

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SAGE

Chronic pain is a common condition, costly to society and with often significant effects on physical function, mental health and daily life. For a proportion of patients, an interventional pain procedure may be appropriate as part of the overall management plan for their chronic pain. Only rarely would this be the sole therapy; more usually, these procedures are performed as part of a multi-modal care plan, aiming towards some reduction in pain scores but also improvement in physical function, mood, sleep and quality of life.

From a patient perspective, it is essential to monitor the outcomes of performed procedures to ensure that we are delivering effective therapies. Clinicians are also required to record outcomes of practical procedures as part of the appraisal process. Focusing resources on those therapies which are most effective is essential if we are to deliver a cost-effective service in the context of a continuously evolving health service, both locally and nationally.

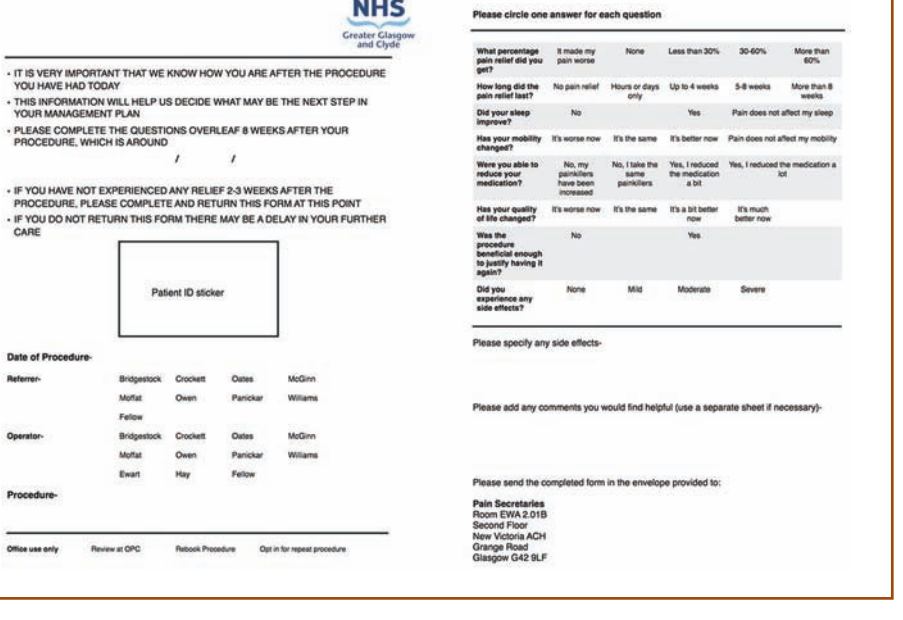
A survey published in the recent edition of *Pain News* investigated the process for follow-up of patients after injection.[1] They concluded a marked difference in follow-up practice, in time to follow-up, clinician performing follow-up and outcomes recorded.

Assessment of outcomes

A pilot project to record patient outcomes after interventional pain procedures was trialled in Glasgow in 2010. A paper-based questionnaire was developed by members of the multi-disciplinary team, including medical, nursing and psychology staff. The pilot project included 50 patients who were asked to complete the questionnaire at 8 weeks post procedure and return it by post. Non-responders were contacted by telephone at 10 weeks as a reminder. A further short form recorded how easy the questionnaire was to complete, whether all questions were understandable and asked for suggestions to improve the questionnaire. Results of the pilot project were analysed, and our current outcome audit form was developed (Figure 1).

Since summer 2011, all patients attending interventional pain procedures

Figure 1. Glasgow chronic pain management service



NHS Greater Glasgow and Clyde

- IT IS VERY IMPORTANT THAT WE KNOW HOW YOU ARE AFTER THE PROCEDURE YOU HAVE HAD TODAY
- THIS INFORMATION WILL HELP US DECIDE WHAT MAY BE THE NEXT STEP IN YOUR MANAGEMENT PLAN
- PLEASE COMPLETE THE QUESTIONS OVERLEAF 8 WEEKS AFTER YOUR PROCEDURE, WHICH IS AROUND

/ /

- IF YOU HAVE NOT EXPERIENCED ANY RELIEF 2-3 WEEKS AFTER THE PROCEDURE, PLEASE COMPLETE AND RETURN THIS FORM AT THIS POINT
- IF YOU DO NOT RETURN THIS FORM THERE MAY BE A DELAY IN YOUR FURTHER CARE

Patient ID sticker

Date of Procedure-

Referrer- Bridgestock Crockett Oates McGinn Moffat Owen Panickar Williams Fellow

Operator- Bridgestock Crockett Oates McGinn Moffat Owen Panickar Williams Ewart Hay Fellow

Procedure-

Office use only Review at OPC Rebook Procedure Opt in for repeat procedure

Please circle one answer for each question

What percentage pain relief did you get?	It made my pain worse	None	Less than 30%	30-60%	More than 60%
How long did the pain relief last?	No pain relief	Hours or days only	Up to 4 weeks	5-8 weeks	More than 8 weeks
Did your sleep improve?	No		Yes	Pain does not affect my sleep	
Has your mobility changed?	It's worse now	It's the same	It's better now	Pain does not affect my mobility	
Were you able to reduce your medication?	No, my painkillers have been increased	No, I take the same painkillers	Yes, I reduced the medication a bit	Yes, I reduced the medication a lot	
Has your quality of life changed?	It's worse now	It's the same	It's a bit better now	It's much better now	
Was the procedure beneficial enough to justify having it again?	No		Yes		
Did you experience any side effects?	None	Mild	Moderate	Severe	

Please specify any side effects-

Please add any comments you would find helpful (use a separate sheet if necessary)-

Please send the completed form in the envelope provided to:

Pain Secretaries
Room EWA 2.01B
Second Floor
New Victoria ACH
Grange Road
Glasgow G42 9LF

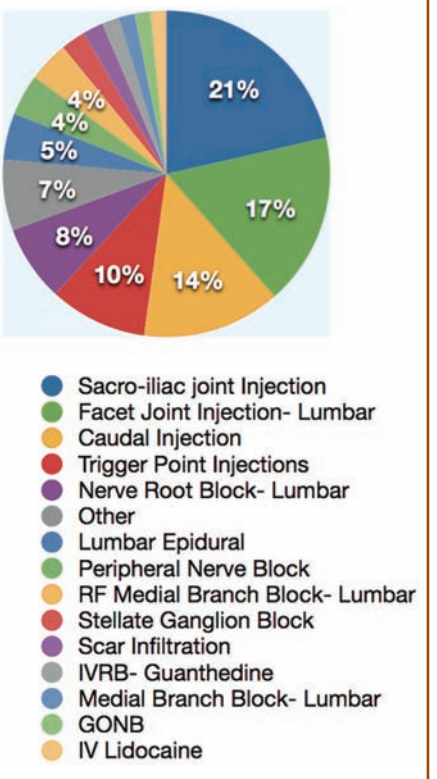
in either treatment room or theatre sessions across National Health Service (NHS) Greater Glasgow and Clyde have been asked to complete an outcome audit form. Currently, procedures are performed in three hospitals within the trust, all by medical staff. At the time of procedure, each patient is given a standard A4 form which has been partially completed with simple demographic information, a note of procedure and date performed and the name of both the referring and operator clinician. An addressed envelope is provided, and the patient is requested to return the form, by post, 8 weeks post intervention. The majority of patients do not have any further medical follow-up arranged until this outcome form is returned, and there is no system in place for 'chasing up' forms not returned.

The form, as shown in Figure 1, asks the patient to record the effect of their interventional pain procedure on a number of factors, including proportion and duration of pain relief, sleep, quality of life, mobility and medication use. The patient is also asked about the extent of side effects, with a free text area to comment on these, and whether they feel the procedure was beneficial enough to repeat.

Upon return, the questionnaire is reviewed by the referring clinician with a decision made as to whether to offer further interventional procedures and whether to arrange follow-up. Forms are then collated and stored separately from patient notes, with some clinicians choosing to add a note to the patient record regarding outcome. Outcome data are entered onto the Outcomes Database, running on Microsoft Access, by several clinicians.

Data, from the Outcomes Database, was analysed from 1 August 2011 to 31 July 2012, representing our first year of data collection. In all, 836 completed questionnaires, from a total of 1,390 performed procedures, were analysed, representing a return rate of 60%. Procedures were performed by 14 clinicians, and 65% of patients were female. Figure 2 shows the variety of procedures performed, the most common being sacroiliac joint injection, lumbar facet joint injection, caudal epidural injection, trigger point injection and lumbar nerve root block, in total accounting for 70% of all procedures.

Figure 2. Procedures performed



Considering degree of pain relief, 58% reported greater than 30% reduction in pain and 28% of patients reported greater than 60% reduction in pain (Figure 3). Duration of effect was greater than 4 weeks for 47% of patients, with 21% still gaining effect at the 8 week follow-up (Figure 4). Sleep was noted to be improved by 36% of responders, and 29% stated an improvement in their mobility. Perhaps the most important marker, 40% stated an improvement in their quality of life.

Figure 3. Percentage of pain relief after intervention

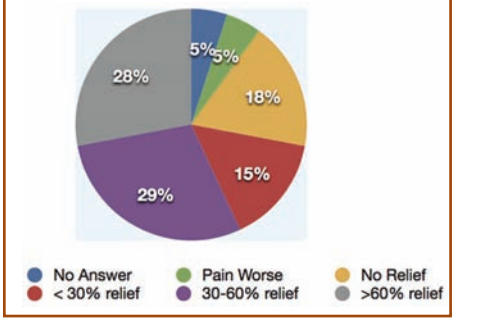
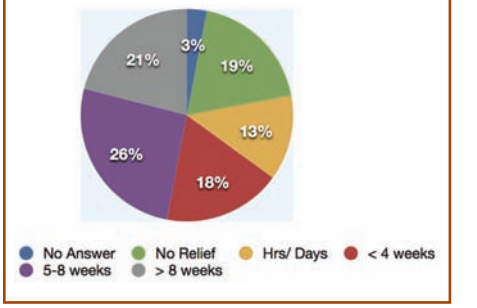


Figure 4. Duration of pain relief after intervention



Those gaining a reduction in pain relief of >30%, for over 4 weeks, are considered to have a positive response to intervention. On these criteria, 42% of our sample can be defined as 'responders'. In this group of responders, 48% also reduced their analgesic use. Side effects were recorded by 25% of all patients, most commonly pain in the area of injection. In this sample, 55% of patients were offered a repeat procedure.

Changes in practice

Since the original data analysis, considering our first full year of outcome recordings, we have made some small changes to practice. Within NHS Greater Glasgow and Clyde, we now work paper-light and use only an electronic patient record accessed via a clinical portal. When outcome forms are

returned, these are scanned and added to the patient file prior to data being entered to the database. This can be useful when comparing effect of procedures which are performed on a number of occasions. We are also now using these forms to record outcomes from acupuncture, which was previously not included as a procedure. While the data held within the database are accessible to all clinicians, working with Microsoft Access is not so familiar to many, so an automatic report generator has also been created in which a clinician can enter their operator code to produce an individual summary, which can form a useful part of the appraisal documentation.

As with all ongoing data collection, there is a compromise to be reached between gathering adequate useful data to direct therapies at both individual and service level versus a desire to use a number of large, well-validated questionnaires to achieve the most scientifically robust results. Our service is dependent on patients completing these forms themselves, at home, and remembering to post them back, then clinicians entering data manually in order to maintain the database. Any change to the nature or volume of data currently collected needs to be carefully considered so as to continue to produce useful, meaningful data without increasing the non-response rate due to complexity of questionnaire.

Having presented the findings both locally, and nationally, we have identified a number of points in our current system which we would consider modifying to make improvements, as listed below:

- Modification to details recorded at time of intervention to include medications used, for example, to allow for steroid versus non-steroid comparisons;
- Modification to details recorded at time of intervention to include note of whether first time procedure or repeat, as repeat procedures are more likely to be responders, therefore positively skewing data;
- Modification to form to include average pain score at time of intervention and again at time of return. This can quickly be further assessed at other appointments within the pain service and tracked over time;
- Increase in length of follow-up to 12 or 16 weeks. By merely extending the current system, this is likely to have a negative impact on return rates;
- Consider alternative modes of data collection such as an online survey. This would require significant changes to our current database and a secure server system, only accessible by patients with Internet access and a level of information technology (IT) skills. Alternatives could include posting out a further form at a later follow-up date or telephone follow-up, both of which would require personnel resources;
- Aim to improve our return rate by using an SMS reminder service when the form is due to be returned.

A further concern is that interventional pain procedures should not be performed in isolation without addressing the wider principles of pain management. Setting realistic expectations with patients for the role of interventional procedures prior to first procedure is vital. While the majority of patients will be encouraged to attend our patient education sessions, and many are referred on for specialist physiotherapy or psychology, we do not have a system currently that allows for the timing of these different interventions to be optimised. If an interventional procedure gives a reduction in pain, this window of opportunity is an ideal time to work on pain management through all resources. This approach would require co-ordination from all sectors within the pain management team but would potentially be much more beneficial to patients, delivering a cohesive approach to their management.

A possible interim suggestion is to first ensure all patients attend a pain education session prior to an interventional procedure, then to perform a top-up session immediately after intervention, focusing on goal setting, pacing up activities and individual advice on how to alter medication if the procedure is beneficial. Again, this service requires resourcing but would be less complex to institute.

In a very recent development, funding has been secured locally to run a short-term feasibility research project conducting more intensive screening pre-interventional pain procedure and looking at outcomes. This will aim to identify cohorts of patients who are more or less likely to be responders to interventions, and also those who are more or less likely to show a functional improvement and will hopefully lead to a large-scale prospective study further investigating the findings.

Conclusion

In the current financial straits of the NHS, it is vital to ensure we are delivering a cost-effective Pain Management Service across all therapies, including interventional pain procedures. As clinicians, we also have a responsibility to 'first do no harm', and should certainly not be exposing patients to potential risk (both physical and psychological) without good evidence of benefit.

Our system of outcome assessment and associated database is an excellent starting point to allow examination of our practices, and continues to grow with now over 1,500 procedure entries. We look forward to developing our system further to deliver a clear algorithm for interventional pain procedures to our patients.

Reference

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End stuff

Laughing the pain away

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When you bang your toe on the leg of a table, what do you do? Cry out in agony? Whimper and let tears of self-pity roll down your cheeks? Shout out a string of obscene vocabulary you hope your kids don't hear? Or silently screw up your face and hop around in a spontaneous albeit strange dance?

Whether you're a hopper, a crier or sufferer in silence, some of you may be in a completely different and peculiar category altogether - the laughers. Those strange people who are in fits of hysterics when they're in pain and you stand there not knowing whether to help them, laugh with them, or laugh *at* them.

However, there may be some method to their hilarious madness. Research has shown that laughter generates the release of endorphins – the body's own painkiller. It is thought that the long sequence of exhalations that goes hand in hand with genuine laughter contracts and relaxes the abdominal muscles, therefore triggering a release of endorphins.

The benefits don't end there! A good chuckle alleviates physical tension, keeping your muscles relaxed for up to 45 minutes after. Similarly, it improves your immune system by lowering stress hormones and increasing the production of antibodies and immune cells. Laughter also protects the heart through the increased blood flow, which advances the function of blood vessels; this can save you from many heart problems in the future.

Another form of this therapy is laughter yoga, or *Hasya yoga*, which was started in 1995 by an Indian doctor named Madan Kataria. However, this doesn't involve your conventional downward-dogs and sun salutations. It uses whimsical activities and conducted breathing exercises to generate laughter. Moreover, doing this in a group would be even more beneficial, because as we all know, laughter is as contagious as the common cold. So, turning a shy giggle into a raging howl is far from impossible.

Laughter as a pain relief is not as relatively modern as you may think, because as far back as the 13th century, doctors used humour as a diversion for their patients to reduce pain. Even further back than that, in the Book of Proverbs, written over two thousand years ago, states the healing influences of laughter.

So, the next time you hit your thumb with a hammer, don't wake the neighborhood with your cries to deities and hurriedly rummage for a paracetamol, simply find humour in the situation and let those trusty endorphins do the rest of the work!

Book review

The British Pain Society

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SAGE

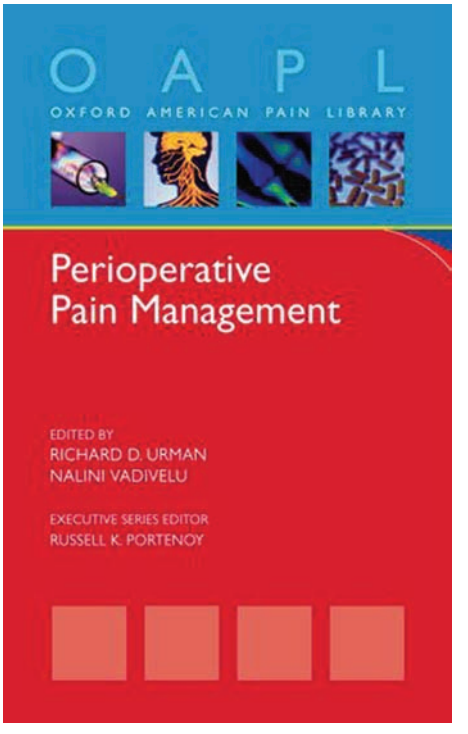
Oxford American Pain Library: Perioperative Pain Management by Richard D Urman, Nalini Vadivelu, OUP USA, ISBN 978-0-19-993721-9

Reviewed by Dr Jayprakash Patil
Locum Consultant Anaesthetist, Manchester

This slim pocketbook of just over a 100 pages deals with Perioperative Pain Management which is an important and highly relevant topic. As part of the Oxford American Pain Library, it invariably provides an US perspective on this issue with inherent differences in practise to UK and Europe. This is also reflected in the contributors' list wherein the vast majority are American practitioners. The book is referenced comprehensively. Given the topic dealt with, it will always be a challenge to collect all the required information but yet keep the book size handy enough for a quick reference.

The book begins with a chapter on a team approach for the delivery of acute pain services and provides an overview of the mechanisms of pain with relevant anatomy and pathophysiology. There are brief chapters on pharmacologic agents that are broadly classified as opioids and non-opioids and a rough guide to regional anaesthetic techniques. The table listing the equivalent doses of opioids is useful for prescriptions. There are additional sections on assessment of pain and medication delivery systems. Several special populations such as paediatric, geriatric and obstetric patients, and patients with chronic pain and substance abuse are identified and issues specific to these patient groups have been considered. Complementary and alternative medicines are also briefly mentioned. The book ends with a section on future directions and outcomes. This final chapter highlights the increasing use of ultrasound in regional anaesthesia, the advent of newer intravenous NSAID and local anaesthetic formulations, the use of anticonvulsants to reduce postoperative opioid consumption and the potential application of biotoxins in regional anaesthesia.

However there are a few omissions and errors of note. To mention a few, the techniques of rectus sheath, subcostal transversus abdominal plane blocks and high volume local anaesthetic infiltration which is an integral part of current enhanced recovery programmes are not quoted. α-2 agonists such as clonidine and dexmedetomidine are also not mentioned. Agonism on sigma receptors is erroneously attributed as a mechanism of action of opioids. A few colour pictures and the use of a larger font would make the book a lot easier on the eye of the reader.



Would I recommend this book?… As James Bryce, a British academic and historian said, *"The worth of a book is to be measured by what you can carry away from it"*. A book of this type would be useful as a quick reference guide for junior doctors and those "less specialised" in allied surgical and medical teams. However, I have doubts whether this will appeal to readers who are specialised in anaesthetics/ pain medicine.

End stuff

Course Review: Practical Management of Chronic Pain, Liverpool

The British Pain Society

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Dr Sadiq Bhayani *Advanced Pain Trainee, Nottingham City Hospital*

Starting as an Advanced Pain Trainee can be a daunting task and there is a lot to take in. Given that we as trainees do not get that much exposure to Chronic Pain Medicine during our Core Training, Intermediate Training and Higher Training, working as an Advanced Pain Trainee is like starting as a Novice Trainee in Anaesthetics.

In order to get up to speed with the knowledge, to develop the skills and exposure to the various other aspects of pain medicine like Physiotherapy, Pain Management Programme, Neuromodulation, Psychology etc. there is always a need for a comprehensive and affordable course which can pack all the topics related to pain medicine, and also give exposure to the other disciplines as mentioned above.

I recently heard about the "Liverpool Chronic Pain Management Course" and attended it, and discovered that it is just what satisfies all of these needs. It's a great course. The Faculty are all very enthusiastic, friendly, knowledgeable and very approachable. They also know that not everyone is familiar with all the basic principles in pain, so their teaching is tailored to the audience.

There is section for joint outpatient clinics, which offered a great way to know how multidisciplinary approach is useful for effective Pain Management of chronic pain patients and also gave a flavour of the day to day scenarios. The live theatre sessions were an absolute hit; procedures were shown with all of the minute details, the importance of patient positioning and adequate X ray usage including projection of C-arm was well worth knowing and observing in action. It would be useful to let the candidate know which clinic they have been allocated to in advance; so they can read about it to get more out of that session.

The hands on skills on spine manikin were very useful and we should not forget the excellent presentations from the faculty. Also, the grand rounds with patients giving feedback were a great approach to put together everything that we had learned during the course. The theatre staff, administration staff and course dinner - all were brilliant with opportunity to network and communicate further.

The content of the course was very well mapped for all levels of audience. I think the current structure and content of the course is near perfect. If the course was over four days to cover all of the clinical stuff, that would put up the price and I am not sure whether everyone would like to go on a four day course.

I think this course is well worth every penny of the small fee and is value for money considering just how much you can learn in three days. The course also gives an opportunity to update your self with what's happening in the rest of the UK in terms of new therapies and procedures etc., by allowing you to network with various candidates from all over the country.

There wasn't that huge a choice for vegetarians at lunch, so perhaps the catering facilities can be improved. Overall, it's an absolutely brilliant course and is strongly recommended.

End stuff

A question of mind over matter: exploring the link between pain perception, duration and disability

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This essay was submitted for the Pain Relief Foundation's Medical Student Essay Competition in 2012.

Chronic non-cancer pain is a severely debilitating and highly prevalent condition, responsible not only for the persistent suffering of those afflicted, but also soaring health-care costs, unemployment and a growing burden of social welfare.[1,2] Our understanding of pain perception, and the complex mechanisms that regulate it, has transformed in recent decades to embrace a biopsychosocial model, allowing increased credibility for the affective dimension of pain.[1] This widely accepted model recognises that chronic pain is a unique and complex syndrome for each individual determined by physical pathology, health beliefs, coping strategies and social interactions.[2,3] Importantly, it recognises that pathology, pain perception and disability are conceptually related, but distinct entities.[3,4] Growing evidence suggests that psychosocial factors have such profound influence on pain perception and disability that they deserve equivalent therapeutic attention to an identified pathological cause of pain.[4]

Despite this, many clinicians associate chronic pain with large discrepancies between the objective underlying pathology and the subjective magnitude of pain and disability experienced by the patient. Several believe that, although important, psychosocial factors alone do not fully explain the disconnect between pathology, pain perception and disability. Indeed, altered pain processing is just one part of the complex phenomenology of chronic pain.[5] This article will explore the impact of the psychosocial dimension of pain on the chronicity of symptoms and patient disability. Importantly, it will pose the rather worrying question: does the way we practise medicine today maintain, or even increase, disability?

The neurocognitive aspect of pain

Pain is as diverse as man. One suffers as one can.

-Victor Hugo, French poet and novelist[6]

Chronic non-cancer pain is associated with altered mechanisms of central and peripheral nociceptive processing, which have profound effects on pain perception. Increased pain sensation is attributed to two phenomena: exaggerated pain perception at higher brain centres, due to disturbance of endogenous pain modulation, and neuronal hyper-excitability.[2,5]

Exaggerated pain perception increases pain sensation in response to innocuous or mildly painful stimuli with potentially severe clinical implications, including magnified pain with physical activity, a major determinant of disability.[5] Central neuronal sensitisation is characterised by amplification of the synaptic strength in nociceptive circuits. This lowers the threshold required to activate nociceptive neurons, allowing signal generation by innocuous stimuli. Importantly, both these mechanisms are involved in the development and maintenance of chronic pain.[2]

There are two independent, but parallel, pathways to the somatosensory cortices for processing afferent nociceptive sensation. The lateral pathway comprises the cognitive aspect of pain processing; this defines the location of pain and mediates the experience of pain intensity. In contrast, the medial pathway constitutes the emotional processing of pain sensation, which determines its effect on the individual; this pathway carries affective signals to the limbic system.[7–9] Importantly, nociceptive processing includes down-regulation of pain sensation. Automated control is mediated through efferent inhibitory

mechanisms in the periaqueductal grey matter of the midbrain. Conscious control is modulated by activity in the 'pain control centre' of the dorsolateral prefrontal cortex.[8,10]

Discovery of the architecture of these processing pathways prompted the development of mental strategies, using focused attention and distraction, to reduce pain sensation and improve tolerance, by altering pain perception. These strategies aimed to separate the more subjective emotional aspect of pain perception from the more objective components, intensity and location, by focussing on these latter details.[8,11–13] Distraction techniques seek to redirect attention from a painful stimulus to a simultaneous innocuous sensation, through visual, audio or somatosensory media.[13] In contrast, focussed attention encourages individuals to concentrate on a sensory component of the pain, for example, intensity or location.[11]

Experimentally, these techniques demonstrated great success in modulating the perception of pain intensity.[11,12] Clinically, however, the results were disappointing, due to the demanding nature of the techniques, which were too exhausting for patients to maintain long term.[14,15] Overall, focussed attention proved to be more effective than distraction, because it prompted patients to directly address the pain sensation.[12] Importantly, this demonstrated the profound influence of individual attentional focus on the plasticity of somatic interpretation of pain.[16]

The effort involved in these mental strategies was central to minimising the perception of pain.[13,15,17] One theory suggests that the central nervous system has a limited capacity for information processing; thus, mental strategies involving attentional focus compete for and consume more of the processing resources, limiting those available for nociceptive input. However, this leads to profound fatigue, reducing an individual's ability to conduct other activities of daily living. Consequently, these techniques are now considered counterproductive for patients with chronic pain. Yet, evidence suggests that patients frequently resort to similar maladaptive coping techniques, to minimise pain during physical activity. Unfortunately, repeated failure of these ineffective strategies perpetuates distress, inevitably resulting in cognitions of catastrophising.[15]

The power of pain perception

Fear is pain arising from the anticipation of evil.

-Aristotle, Greek philosopher[6]

Chronic pain is difficult to define, as it cannot be distinguished from acute pain by duration alone but also by the body's inability to restore physiological functions to normal homeostatic levels and the mere transient relief provided by medicinal treatment.[1] Acute non-cancer pain develops into chronic pain as a result of complex interactions between biological, psychological and social factors.[3,18] Growing evidence has highlighted the particular importance of psychosocial factors in this process. Pain-related cognitions, health beliefs and coping behaviours are key to determining a patient's adjustment to pain, which influences pain sensation and the development of disability.[2,4,19]

Importantly, it appears that attentional bias to painful stimuli is closely associated with the development of chronic pain.[17] There is a high prevalence of these information-processing biases and maladaptive cognitions in patients with chronic pain, particularly catastrophising: an excessively negative orientation towards painful stimuli and pain experience. Catastrophising creates the perception that pain may be threatening, prompting the development of pain-related fear. This fear affects cognitive functions, promoting hyper-vigilance for nociceptive input and an inability to direct attention away from pain, which generates higher levels of pain intensity and psychological distress.[18,19] The inability to redirect attention from nociceptive sensations may predispose individuals to chronic pain syndromes.[8,15]

Catastrophising is also associated with muscular reactivity and avoidance behaviour, both of which contribute to perceived disability. In the long term, catastrophising individuals avoid physical activity, leading to the development of functional disability, associated mood disturbance and depression.[3,4,20] This maladaptive cognition results in increased use of health-care services and analgesic medication, and a reduced quality of life.[19,21,22] The resulting fear of pain may be more debilitating than the actual pain itself, as catastrophising is one of the most accurate predictors of physical disability.[4,18,23] Depression is another major predictor of disability in patients with chronic pain, because it increases perceived pain sensation.[18,24,25] Worryingly, 50% of the 7.8 million Britons currently living with chronic pain are also diagnosed with depression.[26] Interestingly, although pain duration and intensity impact patients' quality of life, it is more dependent upon their health beliefs.[18,21]

Scepticism and the extinction of empathy

The greatest mistake in the treatment of diseases is that there are physicians for the body and physicians for the soul, although the two cannot be separated.

-Plato, Classical Greek philosopher[17]

Individuals with chronic non-cancer pain often describe encounters with health-care professionals in which their pain is met with doubt and disbelief, particularly in the absence of an obvious pathological cause.[27,28] For patients, the suggestion that their pain is purely psychosomatic, or

even fictitious, is humiliating and distressing. The insult to their dignity can prompt the development of maladaptive coping techniques, including social isolation, to avoid the embarrassment of further judgements. Alarmingly, many have described consciously altering their behaviour and appearance in response to this disbelief, to visibly demonstrate the credibility of their pain.[27,29,30] Maladaptive behaviour to legitimise an individual's pain is both physically and psychologically demanding, predisposing these patients to further negative cognitions and potentially generating functional disability.[27,29]

Unfortunately, stigmatisation of patients with chronic non-cancer pain is common in the community, media and medical practice, particularly in the absence of an identifiable diagnostic cause.[27,31] Research nurses warn of an extinction of empathy among clinicians, who base their judgement upon negative community stereotypes, often perpetuated by the media.[31] Stigmatisation is in part due to the assumption that symptoms are directly linked to pathology, but also the domination of Cartesian dualistic thinking in Western medicine, which suggests that pain must be the result of either a disturbed body or a disturbed mind.[31,32] Debates in Western medical literature that explore chronic pain syndromes in the absence of identifiable organic pathology often conclude that the pain must be 'psychogenic', precluding further meaningful observations or communication with the patient. This scepticism can cause iatrogenic stigmatisation.[31]

Change in community and clinical attitudes will require education programmes to raise awareness that psychosocial factors can profoundly influence and worsen an individual's experience of pain. Increased consciousness of this fact among health-care professionals may trigger re-emergence of lost empathy and a renewed understanding of the biopsychosocial model of pain.[31] The Pain Summit in 2011 advised the media of its moral obligation to improve awareness that pain may be truly valid in the absence of an objective pathological cause. Furthermore, it called for improved training of health-care professionals, even going so far as to criticise the curriculum for providing clinicians with less 'pain training' than veterinary surgeons.[26] Yet, there is little evidence basis for the influence of legitimising pain experience on a patient's pain behaviour, social interaction and psychological adjustment; it has only been noted in qualitative research studies.[27,33] However, early validation of symptoms is linked to the development of adaptive coping mechanisms, resulting in reduced pain perception and greater long-term functional ability.[27]

Multidisciplinary management of pain

We must build dikes of courage to hold back the flood of fear.

-Martin Luther King Junior, leader in the African American Civil Rights Movement.

Medical pharmacotherapy for chronic pain remains a challenging balance between providing adequate pain relief and tolerability of medication. Yet, it can only provide transient pain relief.[1,2] The biopsychosocial model heralded research development of multidisciplinary programmes for the management of chronic pain, which aimed to minimise pain sensation and associated distress, by influencing pain behaviour. Ultimately, these programmes seek to improve pain tolerance, mobility and function, allowing patients to maintain a better quality of life.[2,3,34] There is now a strong evidence basis demonstrating better outcomes for chronic non-cancer pain with multidisciplinary treatment programmes involving physiotherapy, cognitive behavioural and medical therapies, than standard medical interventions.[2,4,35–38]

Cognitive behavioural therapy, providing patients with psychological and behavioural skills to confront their pain, is key to the success of these multidisciplinary programmes.[34,38] Techniques of stress management, relaxation training, goal setting and physical activity have demonstrated clear efficacy in adjusting patient coping mechanisms.[39] A central principle of behavioural therapy is that individuals are not helpless in managing their pain, but can overcome, or even avoid developing, significant functional barriers through altered patterns of cognition.[38] Cognitive restructuring moderates the effect of persistent pain by changing the way in which the brain processes nociceptive information, in a similar manner to the modification of juvenile brain processing in early life.[1,19] Early intervention can reduce the pain sensation, improving tolerance of chronic pain and minimising disability. More significantly, it could even prevent the development of chronic pain.[4,19,40]

The skills and experience of health-care professionals are fundamental to the success of cognitive behavioural therapy, but outcomes are principally dependent upon the comprehensive nature of the programme and methods of intervention. Patient characteristics and programme duration can influence efficacy; successful outcomes require effortful

commitment of participants to engage with the problem.[17,38] Studies have shown that highly distressed patients, with more negative cognitions and evidence of catastrophising, achieve poorer outcomes. However, it is important to note that even minor cognitive changes in this patient group could substantially improve their quality of life.[34]

Chronic pain is not a homogenous entity, and the variables of the biopsychosocial model are interdependent; thus, one cannot be treated at the expense of another. Effective rehabilitation requires detailed assessment of all the dimensions of chronic pain and must include advice and support to manage patient expectations.[4] Importantly, multidisciplinary programmes have also proved the most cost-effective approach to managing chronic pain.[3,18] However, it is essential to remember that, for many, chronic pain is caused by a permanent pathological disease process. As such, their pain and functionality may remain relatively unchanged by cognitive behavioural therapy.[39]

The current state of play

Ideas not coupled with action never become bigger than the brain cells they occupied.

-Arnold Glasgow, American satirist[6]

Despite convincing evidence, national audit statistics reveal a relative paucity of multidisciplinary programmes in the United Kingdom, with only 64% of pain clinics providing multidisciplinary intervention in 2011. Even more worryingly, only 40% of these could provide evidence to support their claim.[26] Yet, it is a truth universally acknowledged that chronic non-cancer pain places a collective burden on society and represents a major challenge for public health.[26,41] It continues to feature among the top 10 health problems limiting productivity in the United Kingdom, and is regarded as a considerable barrier to seeking employment. This prompted the nation's first Pain Summit in 2011. Among many issues, this meeting highlighted the disparity in health-care provision for chronic pain across the country, and repeatedly acknowledged the potential economic benefits of improved pain management to 'keep people in work'. This, it was claimed, could improve self-esteem and provide financial independence, but perhaps most cynically, would boost British productivity 'by several billions of pounds'.[26]

Notwithstanding the dramatic effects of cognitive behavioural therapy, current multidisciplinary programmes continue to produce disappointingly high rates of therapeutic failure, with evidence of short-term effects and uncertainty surrounding the factors most crucial to patient improvement.[2] More effective programmes are comprehensively multidisciplinary and integrated into primary care services. There is a desperate need for better primary care tools and training, to identify and manage psychosocial risk factors, and education to address iatrogenic stigmatisation of patients, in both clinical and community environments, and discourage the dualistic framework that perpetuates negative stereotypes.[4,31] The media should be central to communicating this message, and promoting positive role models for adaptive coping behaviours.[26] Although costly, better training of health-care professionals is essential, and should incorporate skills in eliciting psychosocial factors and characteristic behaviours in chronic pain. Combined with the expansion of multidisciplinary programmes across the United Kingdom, this would elevate primary care providers to a uniquely powerful position in which to identify and target psychosocial factors early in the disease process, before pain has become chronic.[4,26]

Conclusion

The patient's pain perception has the potential to influence not only the duration and severity of their pain but also their mobility and daily function. It is essential to appreciate the complex interaction between psychosocial factors and physical pathology, and their influence on the development of patient symptoms. This is particularly true of chronic pain, where catastrophising and inability to redirect attention from painful stimuli substantially increase a patient's risk of prolonged pain and disability. Thus, it is imperative that early and effective cognitive behavioural therapy is available to all patients suffering severe or acute pain. Medical consults have a powerful effect on pain perception and legitimisation, which can be unfortunately compromised by iatrogenic stigmatisation. Current service provision in the United Kingdom is woefully inadequate, but expansion and continued development of multidisciplinary pain management programmes would help not only those affected by the pain but potentially the nation's economy. In a time of such economic uncertainty, these interventions cannot be ignored.

References not included but can be obtained from the author by email.

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Remifentanil PCA in acute sickle crisis pain

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Case report

31 year old pregnant patient with known sickle cell disease was admitted through A&E with severe leg pain and shoulder pain. She was 38 weeks pregnant and booked for an elective LSCS in the following week. She was treated with fluids and analgesia (morphine boluses). She was transferred to HDU in the maternity unit. Anaesthetist was asked to prescribe morphine PCA (which the patient used to have before in her acute crisis). The patient was worried that at her last delivery, the baby was a bit floppy as she had a similar episode and had morphine PCA.

Management

We discussed with the patient regarding remifentanil instead of morphine PCA - short acting as well as minimal residual effects to the fetus. Patient agreed and was educated about the usage of remifentanil PCA. Patient used it erratically (pain score of 8 as compared to 6 with morphine) but was pleased with the pain relief, which she stated was superior to morphine but short lasting. She was also happy about the fetal movements she could feel as she didn't feel it more last time and was worried. After the acute pain episode was over, she was transferred back to the ward with oral analgesia. Later she had a LSCS uneventfully.

At the postoperative visit, patient was satisfied with remifentanil PCA and requested that she should be given if a similar episode occurs again.

Discussion

Sickle Cell Disease

Autosomal recessive genetic blood disorder characterised by red blood cells that assume an abnormal, rigid, sickle shape. Sickling decreases the cells flexibility and results in a risk of various complications. The sickling occurs because of a mutation in the hemoglobin gene.

Remifentanil

A μ-opioid agonist, remifentanil is rapidly broken down by non-specific plasma and tissue esterases resulting in a short elimination half life (3-10 minutes). It is context insensitive, in that the half life, clearance and distribution are independent of duration and strength of infusion. A comparison of APGAR scores of consecutive neonates born by normal vaginal delivery to women receiving no analgesia, with those born to women using remifentanil PCA, demonstrated no difference. Thinking on the same lines, using remifentanil in acute sickle pain crisis resulted in good analgesia as well as patient satisfaction.

References

Patient-controlled analgesia for labour using remifentanil: a feasibility study Br J Anaesth 2001; 87:415–20

Remifentanil patient-controlled analgesia for labour: a complete audit cycle. Buehner U, Broadbent JR, and Chesterfield B.

Source - Department of Anaesthetics, Rotorua Hospital, Rotorua, New Zealand.

Remifentanil PCA in acute sickle cell bone pain

Erratum

Pain News sincerely apologises for the typo error in the second paragraph of page 143 of our September issue; it should read "*Chronic Pain Services across Glasgow*".

THE BRITISH PAIN SOCIETY

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SAGE

New Members

Ratified at the September 2013 Council Meeting

Name	Position	Institution
Dr Kate Bellingham	GP Partner, GPWSI in Chronic Pain	Page Hill Medical Centre, Sheffield
Dr Simon Berrisford	GP	Eric Moore Partnership
Mrs Amanda Buckley	Specialist Physiotherapist in Back Pain	Back Pain Unit, King's Mill Hospital
Miss Charlotte Anna Cochrane	Student Psychologist	Gloucestershire Hospitals NHS Foundation Trust
Miss Maxine Louise Cozens	Specialist Occupational Therapist	Defence Medical Rehabilitation Centre Headley Court
Dr Lene Forrester	Principal Clinical Psychologist	Aberdeen Royal Infirmary
Prof. Neil Edward Fowler	Professor & Head of Exercise and Sports Science	Manchester Metropolitan University
Ms Sarah Jane Kelly	Specialist Occupational Therapist	King's Mill Hospital
Dr Giandomenico Lannetti	Reader in Human Neuroscience	University College London
Dr Julian Scott-Warren	ST6 Pain Medicine/Anaesthetics	Pennine Acute Hospitals NHS Trust
Miss Madeleine Smith	Deputy Clinical Nurse Specialist	St Thomas' Hospital
Mrs Georgina Stickley	Clinical Specialist Physiotherapist in Pain Management	Birmingham East & North PCT
Dr Karla Toye	Clinical Psychologist	Manchester and Salford Pain Centre
Dr Mohan Kumar Vellalapalayam Sathyamoorthy	Specialty Registrar	Princess Royal Hospital, Telford
Dr Sarah Louise Woods	Principal Clinical Psychologist	Wansbeck Hospital