NEWS
Chronic pain a substantial burden for Society – SIP 2010-2011

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www.change-pain.com
From the beginning the European Federation of IASP Chapters (EFIC) has been one of the major driving forces of the CHANGE PAIN initiative and its objective to increase public awareness of the burden of chronic pain and to improve pain treatment. The international CHANGE PAIN Advisory Panel held its 4th meeting in November 2010 with the aim to discuss latest research findings and exchange best practice in severe chronic pain management.

In order to get a better understanding of the patients’ perspective, CHANGE PAIN supports several research projects. One of these, the National Health and Wellness Survey 2008 has demonstrated the extent of chronic pain in Europe and its negative impact on patients’ quality of life. The results of this 2008 survey have been further confirmed by a second survey in 2010.

Another patient survey, in Germany, has shown patients’ experiences of living with severe chronic pain and the wide variety of ways in which the condition is treated by different specialties. The results of this survey should provide us with a better understanding of the way chronic pain can affect lives and help us to develop more effective coping strategies.

Intensity and duration of pain are not the only factors which need to be taken into account when deciding on adequate pain therapy. The use of a multi-factorial risk score approach emphasises the importance of other factors which play a role in the chronicity of pain. The value of this will be discussed further in this issue.

The European Federation of IASP Chapters (EFIC) has successfully organized the “Societal Impact of Pain” (SIP) meetings in 2010 and 2011 to further raise awareness on the issues in chronic pain management among health authorities, budget holders and policy makers. The aim is to ensure that through an effective, focused approach action will be taken to improve pain management.
“Pain” is a topic which affects every one of us – either directly or via a person who is close to us. Unfortunately, up till now chronic pain has been merely recognized as an underlying symptom and not as a disease in its own right. It is therefore not adequately diagnosed and treated and continues to result in a major burden on our society’s health care budgets and economic systems. In order to raise awareness of the impact that pain has on our societies, the platform “Societal Impact of Pain” was created.

Societal Impact of Pain (SIP) 2010: Multi-Stakeholder Platform for Knowledge Exchange
In May 2010, for the first time a high-profile group of almost 200 health specialists and representatives from Europe’s highest ranking health authorities gathered in Brussels to discuss the „Societal Impact of Pain” (SIP). With the EFIC® (European Federation of IASP Chapters) being responsible for the scientific framework. The objectives of the symposium were to discuss the key challenges, goals, and policy instruments with budget holders, strategic decision-makers and representatives of stakeholder organisations to improve pain care in Europe(*). The symposium saw a lively debate on the first national pilot projects to investigate the economic factors related to the burden of pain both on patients and the society and to point out potential future innovations. There was a broad consensus that treated pain patients cost national governments, economies and societies much less than untreated patients.

SIP 2010 – Initiating the Change
With the first SIP 2010 symposium, change has begun. Awareness was raised on the fact that the societal impact of pain represents a huge social burden due to the high pain-related costs that governments are constantly called to deal with, including absenteeism, disability allowances, assisted care, informal and family care.

* The pharmaceutical company Grünenthal GmbH was responsible for organisation and logistics.

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Discussing the „Societal Impact of pain” on the EU agenda: more than 300 stakeholders from all over Europe participated in the discussions during the second symposium on the „Societal Impact of Pain”, initiating first measures of EU and national policy-making.

As an extraordinary achievement, the symposium “Societal Impact of Pain” was supported by all three European institutions, the EU Parliament, the EU Commission and the EU Council.
Acknowledgement of pain as an important factor limiting the quality of life;

Availability of information and access to pain diagnosis and management;

Increased awareness of the medical, financial and social impact that pain and its management have;

Increased awareness of the importance of prevention, diagnosis and management of pain;

Encouragement of pain research;

Establishment of an EU platform for the exchange, comparison and benchmarking of best practice;

Trend monitoring in pain management by using the EU platform.

Societal Impact of Pain (SIP) 2011: Raising Awareness with the EU Institutions

Since the beginning of May 2011, the issue of pain and its impact on society has become a new topic on the agenda of the EU institutions in Brussels. On the 3rd and 4th May 2011 the second symposium on the “Societal Impact of Pain” (SIP 2011) took place in the European Parliament, bringing together more than 300 European health care stakeholders from over 30 countries. The scientific framework of SIP 2011 was again designed and overseen by the European Federation of IASP® Chapters (EFIC®). Demonstrating its tremendous societal relevance the scientific programme was endorsed by 85 health care organisations (*). In the European Parliament the event was co-hosted by Dr Jiří Maštálka MEP and Dr Milan Cabrnoch MEP. This exciting meeting concluded with a call for action for all countries involved to actively participate in the new “Road Map for Action” in Pain.

The Societal Impact of Pain – a “Road Map for Action”

A major outcome of the 2nd meeting was a decisive ‘Road Map for Action’, which was created in one of the workshops that took place on the second day. The workshop, entitled ‘Pain policy; Ensuring access to pain treatment’, outlines the key issues on how the EU institutions and member states should effectively address the societal impact of pain at EU level. Some countries, for example Italy with the law no 38/2010, have already enacted laws to ensure access to pain treatment. Moreover the Italian Ministry of Health took action recently to monitor closely whether the public companies overseeing the organization of healthcare are complying with this law.

Specifically, the Road Map for Action calls on European governments and the EU Institutions to work on seven concrete policy dimensions on the ‘Societal Impact of Pain’:

1. Acknowledgement of pain as an important factor limiting the quality of life;
2. Availability of information and access to pain diagnosis and management;
3. Increased awareness of the medical, financial and social impact that pain and its management have;
4. Increased awareness of the importance of prevention, diagnosis and management of pain;
5. Encouragement of pain research;
6. Establishment of an EU platform for the exchange, comparison and benchmarking of best practice;
7. Trend monitoring in pain management by using the EU platform.

All information on the programme of “Societal Impact of Pain” 2011, its outcomes, as well as videos, statements, presentations and pictures can be found online at: http://www.sip-meetings.org.

* The pharmaceutical company Grünenthal GmbH was responsible for organisation and logistics.
Several previously conducted surveys have indicated both the prevalence of chronic pain in the general population and also the profound effect which this condition can have on the quality of life for individual sufferers. The success or failure of pain treatment is greatly influenced by a number of factors including patient/physician communication, the treatment environment and the psychological status of the patient. Emotions, negative and positive expectations of treatment success, and anticipation of decreased pain all have a bearing on treatment outcome. The better the patient’s perception of the treatment process, the more likely is the achievement of satisfactory pain relief.

As part of the CHANGE PAIN initiative, a Pan-European Patient Survey is being conducted to gather information about chronic pain treatment from both the patient’s and physician’s perspective with the intention of identifying possible ways in which the patients’ treatment process may be improved. The results from 6,435 patients who participated in this paper and pencil study survey in Germany from July to September 2010 have now been analysed.

Survey results
The results of this survey indicated that 57% of the patients had suffered chronic pain for more than 3 years, 75% for more than one year. Chronic back pain was the main type of pain, affecting 61% of the patients, followed by arthritis pain (28%). Asked to rate the intensity of their pain over the previous 7 days using an 11-point numerical rating scale (NRS), the mean value was 5.6, well above the mean value of 2.0 which patients had considered tolerable for effective pain management.

Analysis of the pharmacological therapies used illustrated the wide range of approaches employed to treat chronic pain. Approximately half of patients took medications from one class only (monotherapy) the other half took medications from different substance classes in combination. The worse the pain, the more combination therapies were prescribed, while monotherapy treatment decreased. The combinations used most often were NSAIDs/non-opioids with weak or strong opioid. More than 50 different combinations of drug use was reported. In all three intensity groups, approximately two out of three patients received non-pharmacological treatment in addition to their pain medication, including acupuncture (~20%), trans-cutaneous electrical nerve stimulation (TENS; ~20%), psychotherapy (~10%) and physiotherapy (~40%).

CHANGE PAIN aims to enhance the understanding of severe chronic pain patients’ needs and develop solutions. One approach is to learn about the treatment differences in Europe in order to improve pain management. The results from patients participating in the CHANGE PAIN Pan-European Patient Survey provide a great insight into patients’ experience of chronic pain, which will help to identify ways of providing more effective treatment and consequently improving the quality of life of these patients.

**COMMENTARY**

Dr med Gerhard H.H. Müller-Schwefe, President of the German Association for Pain Therapy (DGS) about the importance to learn about patient needs

CHANGE PAIN aims to enhance the understanding of severe chronic pain patients’ needs and develop solutions. One approach is to learn about the treatment differences in Europe in order to improve pain management. The results from patients participating in the CHANGE PAIN Pan-European Patient Survey provide a great insight into patients’ experience of chronic pain, which will help to identify ways of providing more effective treatment and consequently improving the quality of life of these patients.
Patient satisfaction
The more intense the pain, the higher the level of pain patients find acceptable under a successful pain therapy; this ranged from an NRS value of 1.4 in patients with mild pain to 2.9 in those with unbearable pain. Almost all patients reported that their current pain level was higher than what they would tolerate under successful therapy. This result was the same in all specialty groups. Overall 30% of responders said they were dissatisfied with their current treatment, with those with the most severe pain showing the highest dissatisfaction. In most cases (84%), insufficient pain relief was cited as a reason, but more than a quarter (29%) cited side effects such as fatigue, sweating and gastrointestinal problems.

About half the patient population reported a medium to high need for improvement in their ability to work, sleep and carry out general activities. In all three situations this need increased proportionally with higher pain intensities.

Treatment variation by specialisation
Further analysis was carried out to determine any variation between patients being treated for chronic pain by GPs, pain specialists or orthopedic specialists. More patients suffered from severe or unbearable pain in the pain specialist and orthopedic specialist groups than the GP group. As in the main survey, the level of pain considered acceptable was proportional to the severity of pain experienced. For each specialisation, the more severe the pain, the lower the proportion of patients who were satisfied with their current treatment. Patients visiting a pain specialist had a higher level of satisfaction with their treatment than those visiting a GP or orthopaedic specialist. As before, the most common reason for dissatisfaction with treatment was inadequate pain relief. Prescribing habits were found to vary according to specialisation. Pain specialists were more likely to prescribe strong opioids as monotherapy or in combination with other drugs compared to GPs or orthopedic specialists who tended to prescribe more NSAIDs/non-opioids. For all specialisations, NSAIDs/non-opioids combined with weak opioids were the most frequent choice. This was followed by NSAIDs/non-opioids with strong opioids for pain specialists and GPs and NSAIDs/non-opioids used with a range of other drugs or in combination with non-medical treatment for orthopedic specialists.

SUFFICIENCY OF PAIN TREATMENT

Patient satisfaction with current pain treatment (specialities differences)

The severity of pain was consistently inversely proportional to their satisfaction with current pain management (European Survey of Chronic Pain Patients: Results for Germany, submitted)

References
The National Health and Wellness Survey (NHWS) is designed to provide a comprehensive assessment on the health status, including the experience of pain of the adult population. In Europe, the NHWS is administered in five countries: the United Kingdom, Germany, Italy, France, and Spain. In the 2008 and 2010 surveys subjects were asked if they had experienced pain in the last month and to report on the frequency and severity of the pain. In the NHWS health related quality of life (HRQoL) is assessed using the generic SF-12 questionnaire. Labour force status is assessed as well as experience of absenteeism and presenteeism for those in employment. The survey also collects data on subjects’ use of health care resources. As the survey covers the entire adult population it allows a comparison of those experiencing pain against those not experiencing pain and thus an evaluation of the deficit effect or burden of pain in the community.

In 2008, the NHWS sample comprised 53,524 respondents of whom 11,891 (22%) reported experiencing pain in the last month. This implies that around 50 million people in these 5 countries experience chronic pain, or approximately 1 in 5 of the EU population over the age of 18. Among these, 11.2 million reported severe pain, 29.4 million reported moderate pain and 9.0 million reported mild pain. In the severe pain category the majority (75.2%) reported experiencing daily pain, whereas only 39.9% of those with moderate pain and 16.1% in the mild pain category had daily pain. When questioned on current health status, the overall pain population reported a pessimistic assessment with less than 20% rating their health as “very good” or “excellent” compared to over 40% in the no pain population.

The effect of pain on HRQoL was greatest in those respondents whose pain was severe and more frequent. Compared to those not experiencing pain, the impact of pain on the physical component score (PCS) of the SF-12 and the SF-6D absolute utility score was substantial. PCS scores in the SF-12 were reduced by over 20 points (approximately 40%) and absolute utility scores in the SF-6D by more than 20%.

When respondents were questioned about their use of healthcare resources, those with severe pain visited traditional providers almost three times as often and were hospitalised more than four times as often compared to those not repor-
The experience of pain, particularly severe and frequent pain, was also found to outstrip the impact of other health status factors in terms of absenteeism and presenteeism, confirming not only that the societal burden of pain is substantial but that it imposes potentially substantial costs on employers.

**NHWS 2010**

The NHWS 2010 patient sample number of 57,805 represented an increase in participants from Italy and Spain. Subjects were asked to report pain experience in the last month and severity and frequency of pain. In this survey, two additional pain questions using 10-point pain scales to quantify current pain and pain experienced in the last 7 days were included. Provisional analysis of the results of the NHWS 2010 in general indicate little difference from the 2008 survey in terms of the prevalence, severity and frequency of pain. The consistent nature of the survey was further indicated by the almost identical scores of the HRQoL in 2008 and 2010.

**Conclusions**

Overall the experience of pain reported in the 2008 and 2010 NHWS points to robustness and consistency of the results achieved. The overall burden of pain is demonstrated in terms of its deficit impact on health related quality of life, health status, employment, workforce activities and healthcare resource utilization, affecting individuals, employers and society as a whole.

**References**

CHRONIC PAIN DEFINITION – INTRODUCING THE RISK SCORE APPROACH

Traditionally the definition of chronic pain has been based on duration. The IASP defines chronic pain as “…pain which persists past the normal time of healing… With non-malignant pain, three months is the most convenient point of division between acute and chronic pain…” Defining chronic pain solely by duration is based on the view that acute pain results in potential tissue damage, whereas chronic pain results from central and peripheral sensitization which remains after nociceptive inputs have diminished. This view does not indicate whether long-lasting pain is clinically significant and definitions that are based on duration alone can be difficult to apply to recurrent pain. Defining chronic pain solely by pain duration is also contrary to the idea that chronic pain is multi-dimensional in nature.

The use of Risk Scores
A recent approach has been to define chronic pain prospectively using a risk score to predict the likelihood that clinically significant pain will be present in the future. Pain severity is assessed from multiple measures of pain intensity, interference with activities and role disability. This is combined with measurements of three other prognostic variables - depressive symptoms, number of days with pain in the past six months and number of pain sites, to calculate a risk score of 0 – 28. Using this method, probable chronic back pain is defined by a risk score of 22-28 (≥80% probability of significant pain in the future). Possible chronic back pain is defined by a risk score of 16-21 predicting ≥50% probability of future significant pain.

A recent study has compared this prospective approach with a traditional duration-based approach to defining chronic pain in terms of their ability to predict future pain course and outcomes. Patients with back pain, headache, or orofacial pain were classified on the 0-28 risk score and by Pain Days during the last 6 months alone. Risk score was shown to be a stronger predictor of future disability, pain related worry, clinically significant pain, unemployment, and long-term opioid use than Pain Days alone for all three conditions.

Back pain is a particularly significant public health problem with approximately 30% of the general population suffering from lower back pain during any one month. It has been estimated that at least 60% of adults experiencing LBP at some time during their life and 6-9% of adults seek healthcare for lower

### PROGNOSTIC VARIABLES – 0-28 RISK SCORE

<table>
<thead>
<tr>
<th>Item</th>
<th>Risk score value*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average pain intensity (0-10 rating)</td>
<td>0 - 2</td>
</tr>
<tr>
<td>Worst pain intensity (0-10 rating)</td>
<td>0 - 2</td>
</tr>
<tr>
<td>Current pain intensity (0-10 rating)</td>
<td>0 - 2</td>
</tr>
<tr>
<td>Interference with usual activities (0-10 rating)</td>
<td>0 - 2</td>
</tr>
<tr>
<td>Interference with work/household activities (0-10 rating)</td>
<td>0 - 2</td>
</tr>
<tr>
<td>Interference with family/social activities (0-10 rating)</td>
<td>0 - 2</td>
</tr>
<tr>
<td>Days of activities limitation due to pain in prior three month</td>
<td>0 - 4</td>
</tr>
<tr>
<td>SCL90-R Depression score</td>
<td>0 - 4</td>
</tr>
<tr>
<td>Number of other pain sites</td>
<td>0 - 4</td>
</tr>
<tr>
<td>Number of days with index pain in prior six months</td>
<td>0 - 4</td>
</tr>
<tr>
<td><strong>Total Risk Score</strong></td>
<td><strong>0 - 28</strong></td>
</tr>
</tbody>
</table>

*Lower risk = 0-15  
Possible chronic pain = 16-21  
Probable chronic pain = 22-28

Adapted from
Von Korff M, Dunn KM. Pain 2008;
back pain annually. This places a considerable burden on primary healthcare where most back pain management occurs. Back pain is linked to depression and is a major cause of work absence.

In patients with back pain, risk score has been shown to consistently predict the presence of significant pain after 6 months better than did the number of Pain Days.

Additional evidence supporting a multivariate approach to defining chronic pain has come from a 12-month study of back pain patients which showed that 85% of poor back pain outcome was related to combined unemployment and high pain intensity. Poor self-rated health, functional disability, upper body pain and pain nuisance were related with pain outcome in over 40% of those with persistent problems.

These studies have shown that a prospective classification of chronic pain based on a multivariate risk score consistently outperformed a classification of chronic pain based solely on pain duration. The risk score approach suggests that chronic pain should be defined by the likelihood that clinically significant pain will continue in the future, not only by how long the pain has lasted.

**Conclusions**

Since pain outcomes are highly variable over time and between individuals, chronic pain should be viewed as a condition whose future implications are uncertain and liable to change. Defining chronic pain prospectively accepts that chronic pain has multiple attributes, including psychological and behavioural outcomes in addition to pain severity and duration. A multi-factorial risk score places the emphasis on additional factors other than pain, suggesting alternative ways in which patients may be helped rather than just by pain control. By broadening the definition, both clinicians and patients may become more aware of other opportunities to improve pain outcomes. The risk score approach is another consideration that has the potential to CHANGE the current way that we use to assess PAIN.

**COMMENTARY**

Professor Joseph Pergolizzi, of the Johns Hopkins University School of Medicine discusses the multi-dimensional nature of chronic pain

The conventional definition of chronic pain according to duration has limited empirical support and does not account for the multi-dimensional nature of chronic pain. Other parameters such as social implications, psychological status, functional impairment and perspectives all need to be taken into consideration. This approach is currently being further evaluated in the SELECT study, part of the CHANGE PAIN initiative, which involves re-interviewing 1000 patients from the NHWS survey who reported moderate to severe back pain. The objectives are to improve understanding of patients’ own definition of chronic pain and its impact, and to investigate the effect of factors such as variation in pain intensity, recall bias and degree of activity impairment.

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**References**

The prevalence, correlates and treatment of pain in the European Union
Langley PC
CMRO, 2011, 27:463–480

The internet-based 2008 National Health and Wellness Survey (NHWS) surveyed 53,524 persons in the UK, France, Spain, Germany and Italy to report on the prevalence, severity and social consequences of pain. Extrapolating the results to the overall population of the 5 EU countries, the presence of severe, moderate, and mild pain within the last month was reported by 11.2, 29.4, and 9.0 million persons, respectively. The prevalence of daily pain was 8.85% in the total pain population.

The effect of pain on normal functioning was shown by impact of severe and frequent pain on the HRQoL (Health Related Quality of Live). This was most noticeable on the physical component score (PCS) of the questionnaire, which was reduced by approximately 40% compared to the no pain population. Pain also impacted on workplace productivity and healthcare resource utilization; labour force participation in the no pain group was 64.46% compared to 44.67% in the severe pain group. Those experiencing severe pain had a substantially higher number of health provider visits (11.83 vs. 4.39), emergency room visits (0.50 vs. 0.18), and hospitalisations (0.59 vs. 0.14).

The reported prevalence of pain in these 5 countries represents a substantial overall burden not only to individuals, but also to employers, healthcare systems and society in general.

Opioids: a two-faced Janus
Ahlbeck K
CMRO, 2011, 27:439-448

Although classical opioids are a mainstay for the treatment of long-term, severe pain, their clinical utility is compromised by the required balance between efficacy and side effects. Adverse effects, both peripheral and central, are responsible for poor quality of life and low compliance rates, resulting in inadequate pain relief. Tolerance development, and dependency are further problems which affect the long-term use of classical opioids, particularly in complex pain conditions such as low back pain, where treatment often involves targeting both the nociceptive and neuropathic pain systems.

Recent treatment strategies include co-administration of opioids with non-opioid analgesics to reduce side effects and/or risk of dependency. For example, controlled release oxycodone has been used in combination with pregabalin to treat patients with neuropathic pain. Novel delivery mechanisms such as transdermal preparations have also been used to improve tolerability of classical opioids. Under development are non-opioid agents that reduce side effects and enhance analgesia such as glial cell modulators, and novel agents with combined opioidergic and monoaminergic activity within the same molecule (MOR-NRI compounds). However, despite these recent advances, there have been very few completely novel drug developments and there remains a continuing need for innovative therapeutic strategies for the treatment of long-term pain.

Pharmacotherapy of low back pain: targeting nociceptive and neuropathic pain components
Morlion B
CMRO, 2011, 27:11–33

Since chronic low back pain (LBP) is classified as a mixed pain syndrome, pharmacological treatment needs to be focused on both nociceptive and neuropathic components. Although opioids target both nociceptive and to a lesser extent neuropathic pain may be effective in chronic LBP, many patients require higher doses or combination treatment. Paracetamol, NSAIDs and COX-2 inhibitors target the nociceptive component of chronic LBP. Antidepressants target the neuropathic component of chronic LBP; however, conflicting efficacy results have been reported. The topical preparation lidocaine 5% plaster, indicated in post-herpetic neuralgia, is effective in localized neuropathic pain in patients with chronic LBP.

Combining drugs with different mechanisms of action (e.g. an agent with µ-receptor activity plus an agent of a different class) represents a rational approach to management of chronic pain with both nociceptive and neuropathic components. Pregabalin is ineffective as monotherapy for chronic LBP but is effective when combined with celecoxib or opioids. However, the utility of free combinations of analgesics is limited by the difficulty of maintaining the dose ratio within the desired therapeutic range, and the possibility of poor adherence. The design of novel strong-acting analgesics with more than one mechanism of action within the same molecule can potentially overcome these limitations.
YOU FIND PRESENTATIONS, VIDEOS AND BACKGROUND MATERIALS ON
www.SIP-Meetings.org

The scientific framework of SIP 2011 has been designed under the responsibility of the European Federation of IASP® Chapters (EFIC®) and endorsed by 85 international patient advocacy and scientific organisations supporting the need for improved pain care in Europe.

SIP provides a platform for health care professionals and specialists, as well as representatives of health authorities, pain advocacy groups, politicians, regulators and budget holders. The pharmaceutical company Grünenthal GmbH is responsible for logistic support, preparation and organisation.