LEADERSHIP AND QUALITY IN HEALTHCARE
LET’S CLOSE THE GAP

Great Idea...

BUT.

There is one gap that medicine has totally ignored and neglected
LEADERSHIP AND QUALITY IN HEALTHCARE
LET’S CLOSE THE GAP

CHRONIC PAIN

? SAMA

Because....
Nobody takes chronic pain seriously ........

Until

ey they themselves, or a loved one, suffers with it...
Chronic Pain

Is there more to it than meets the eye?

Dr Russell Raath
MBChB MMed (Anaes)  FIPP
Anaesthesiologist – Chronic Pain Management
Netcare Jakaranda Hospital
Pretoria
Chronic Pain

Is there more to it than meets the eye?

So... What DOES meet the eye?

Nothing!!

1. It cannot be seen
2. It is purely subjective - cannot be observed or measured objectively

1. Leads MANY to conclude that it does NOT exist
2. Based on ignorance and lack of understanding
That’s right!!

*Nobody takes chronic pain seriously........*

*Until*

*they themselves, or a loved one, suffers with it...*
WE are taught in med school (in the one class in pharms on pain):

Pain has an adaptive and survival purpose:
1. It is a symptom of an underlying condition.
2. Pain will go away once you’ve dealt with the underlying condition.
3. A warning
4. Immobilises for healing

Management – eezi and obvious
1. Pain → Analgesic
2. Stronger Pain → Stronger analgesic (More must surely be better)
3. Combine analgesics ✓
4. Opiates!! Avoid (almost at all cost – addiction & respiratory depression)
   If you Absolutely must use them –
   Absolute minimum (to the point where they are no help)

Easy!! (Who needs a pain clinic or pain practice!!)

BUT.. if it really was that easy, then why…..
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Have ALL doctors - seen:

Patients with apparently unstoppable pain where NO analgesics or amount of analgesics work – not even intra-theecal morphine or SCS
So, we conclude, the only logical conclusion is that they MUST be putting on – need psychiatry. ??? Point of no return (Physical changes)
WE are taught in med school (in the one class in pharms on pain):

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Because...

All the above is true………for ACUTE PAIN – BUT NOT FOR CHRONIC PAIN
The concept that

“pain is pain”

and that chronic pain is simply acute pain continuing for too long

is archaic and wrong
Our mistake is to treat chronic pain as if it were acute or end of life pain.

Jane C Ballantyne: professor of anesthesiology and pain medicine
Eija Kalso: professor of pain medicine
Cathy Stannard: consultant in pain medicine

BMJ 2016;352:i20 doi:10.1136/bmj.i20 (Published 6 January 2016)
This misconception (that pain is pain) leads to:
1. General misunderstanding of what chronic pain is – a pathology.
2. Inadequate and inappropriate treatment of the pain
   a. incorrect medication –
   b. medication dose escalation
   c. overdosing of medication
   c. unnecessary special investigations
      radiology - cost!!
   d. unnecessary surgery or repeat surgery – especially spine surgery
3. General neglect of these patients:
   a. doctor doesn’t know what to do anymore
      (but won’t admit it – just deny it exists)
   b. patients get told it’s in their head – to psychologist or psychiatrist
   c. patients get told they must "learn to live with it" or "change behaviour"
An IDEA of the Scope of the Problem
According to the latest report from the CDC, 20.4% of adults in the United States experience chronic pain.[1]

Chronic pain is now acknowledged as a condition in its own right, underpinned by an agreed set of definitions and taxonomy.\(^1,2\)

There is a strong argument that the most recent estimations of global burden of disease have underestimated the contribution of chronic pain\(^3\).

2. Tracey I, Bushnell M. How neuroimaging studies have challenged us to rethink: is chronic pain a disease? J Pain 2009; 10: 1113–20
Estimates of the [USA] population prevalence of chronic pain vary widely; 8 - 45% of the population reporting chronic pain. 10 - 15% of the population present to their GP with pain. The prevalence of chronic pain increases with age.¹

Pain affects 100 million Americans², 25 million of whom report chronic daily pain³ – HICP - later, Chronic pain is one of the most important issues in both medicine AND public health⁴.

But · · · ·

¹. McQuay HJKE, Moore RA, editors. Epidemiology of chronic pain. Seattle: IASP Press; 20083
While important recent advances in understanding [chronic] pain mechanisms bring the possibility of new treatments, management of chronic pain is nonetheless generally unsatisfactory; two-thirds of sufferers report dissatisfaction with current treatment and most chronic pain persists for many years\(^1\).

Conditions associated with chronic pain

Common causes of chronic pain in Europe

https://www.pfizer.pt/Files/Billeder/Pfizer%20P%C3%BAblico/Not%C3%ADcias/Pain%20Proposal%20-%20European%20Consensus%20Report%20final.pdf
PREVALENCE AND RISK INDICATORS OF CHRONIC PAIN IN A RURAL COMMUNITY IN SOUTH AFRICA

EHIMARIO U. IGUMBOR1, THANDI PUOANE1, STUART A. GANSKY2, and OCTAVIA PLESH2

1. School of Public Health, University of the Western Cape, Bellville, South Africa and 2 School of Dentistry, University of California San Francisco, United States of America.
Prevalence of Chronic Pain South Africa
Age and Gender

Duration of Chronic Pain
South Africa

- 35% 3-6 months
- 14% 7-12 months
- 38% 1-5 years
- 6% 5-10 years
- 7% >10 years
Conclusions
This is the first known study to comprehensively look at the epidemiology and burden of chronic pain in a rural population of an African country. The prevalence of chronic pain in the surveyed rural community was high and comparable to published data for urban settings and in developed countries. Chronic pain was a significant health problem in this rural community within the Eastern Cape Province. Although chronic pain was generally highly reported, being female and of advanced age were identified as risk indicators for chronic pain. Analytical cohort studies about the relationship between risk factors and chronic pain are needed. The observation that pain sufferers did not seem to be satisfied with the medical treatment that they received is important as is the persuasive prevalence indicating the need for intensified preventive strategies. It is clear that there is an urgent need for targeted public health interventions especially towards females and the elderly who experienced a significant chronic pain burden in this rural community.
That’s right!!

Because

Nobody takes chronic pain seriously ........

Until

they themselves, or a loved one, suffers with it...
## Prevalence of Chronic Pain South Africa - Anatomical Location

<table>
<thead>
<tr>
<th>Location</th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>Headache/migraine</td>
<td>5.6%</td>
<td>3.5%</td>
</tr>
<tr>
<td>Face/teeth/jaw/ear</td>
<td>1.2%</td>
<td>0.9%</td>
</tr>
<tr>
<td>Neck</td>
<td>0.8%</td>
<td>0.7%</td>
</tr>
<tr>
<td>Shoulders/elbows</td>
<td>5.5%</td>
<td>5.3%</td>
</tr>
<tr>
<td>Arms/hands</td>
<td>4.4%</td>
<td>3.7%</td>
</tr>
<tr>
<td>Chest</td>
<td>1.9%</td>
<td>1.1%</td>
</tr>
<tr>
<td>Back</td>
<td>21.7%</td>
<td>18.5%</td>
</tr>
<tr>
<td>Abdominal</td>
<td>2.8%</td>
<td>1.3%</td>
</tr>
<tr>
<td>Hip/thigh</td>
<td>3.8%</td>
<td>2.2%</td>
</tr>
<tr>
<td>Knee/ankle</td>
<td>9.9%</td>
<td>6.2%</td>
</tr>
<tr>
<td>Legs/feet</td>
<td>5.1%</td>
<td>4.7%</td>
</tr>
<tr>
<td>General body pain</td>
<td>4.5%</td>
<td>3.1%</td>
</tr>
</tbody>
</table>
Now for the real ‘Kicker”’
Pain Epidemiology

Incidence of Pain, as Compared to Major Conditions in US

30% of population!!

Most of these ALSO have Chronic pain

Pain Epidemiology
Incidence of Pain, as Compared to Major Conditions in US

30% of population!!

Is this ethical??
SAMA?

WHY?

Because,

Nobody takes chronic pain seriously ........

Until

dey themselves, or a loved one, suffers with it...
Prevalence and Profile of High-Impact Chronic Pain in the USA

Concept:
Incorporates both disability and pain duration to identify a more severely impacted portion of the chronic pain population.

Chronic pain most or every day in previous 3 months –
- Increased risk of disability
- Disability in HICP group – more likely than stroke or renal failure

4.8% or 10.6 million in USA – affected by HICP
2500000 in South Africa
Persistent Postoperative Pain - aka PPP
Persistent Post-Procedural Pain - aka PPPP

**DEFINITION:**

1. Pain that develops after surgery
   Pain of at least ‘two months’ duration
   Other causes of pain have been excluded
   
   Macrae BJA 2008

2. Postoperative pain that persists for 3-6 months after surgery
   
   Kehlet et al lancet 2006

3. Pain that persists after the time of healing
   
   Bonica, The Management of Pain 1953
PPP = >25% of population in chronic pain clinics

Concept:

Perkins and Kehlet  Anesthesiology 2000, 93; 1123 - 1133
Many patients suffer from chronic neuropathic pain after breast cancer treatment. All healthcare professionals (medical doctors, nurses and others) need to pay attention to this pain and treat it properly.
Concept:

Some incidences of PPP

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Incidence</th>
<th>Reference</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post-Caesarean (Pfunnesteil incision – Or other procedure too)</td>
<td>12.3%</td>
<td>Nikolajsen</td>
<td>2004</td>
</tr>
<tr>
<td>Knee Replacement</td>
<td>19.0%</td>
<td>Stanos</td>
<td>2001</td>
</tr>
<tr>
<td>Inguinal Herniorraphy</td>
<td>28.0%</td>
<td>Mikkelson</td>
<td>2004</td>
</tr>
<tr>
<td>Mastectomy</td>
<td>52.0%</td>
<td>Macdonald</td>
<td>2005</td>
</tr>
<tr>
<td>Post Thoracotomy</td>
<td>50 – 80%</td>
<td>Senturk</td>
<td>2002</td>
</tr>
</tbody>
</table>

Almost ALL can be traced to nerve damage during surgery.
### Chronic Post Traumatic Pain

<table>
<thead>
<tr>
<th>Condition</th>
<th>Percentage</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orthopaedic trauma</td>
<td>11-48%</td>
<td>(77% in severe trauma)</td>
</tr>
<tr>
<td>Thoracic trauma</td>
<td>59%</td>
<td></td>
</tr>
<tr>
<td>Burn patients</td>
<td>30%</td>
<td></td>
</tr>
<tr>
<td>Spinal cord injuries</td>
<td>26-96%</td>
<td>(86%)</td>
</tr>
<tr>
<td>Traumatic brain injuries</td>
<td>40-75%</td>
<td></td>
</tr>
</tbody>
</table>

Radresa O. et al. J Trauma Acute Care Surg Volume 76, Number 4, 2014

This group has a high % of HICP
PPP – Risk factors and predictors

- Type of surgery
- Genetic predisposition
- Female gender
- Young age
- Preoperative anxiety
- Negative psychosocial factors
- Obesity
- Pre-existing pain
- Inflammatory state
- **Severe/poorly controlled postoperative pain**

Afferent bombardment
Percentage of Patients that Receive Proper Treatment
Reasons for Untreated Chronic Pain

Yes!! That’s tight – you guessed it -
Main reason?

Nobody takes chronic pain seriously ........

Until

they themselves, or a loved one, suffers with it…
Reasons for Untreated Chronic Pain

• Adequate access to pain services in rural, regional and remote areas and indigenous communities.

• Limited knowledge of social and economic causes of pain – patients, doctors and funders

• Prolonged waiting time to access the public funded services compared to private services in pain management

*Example: Waiting time for outpatient pain management services through publicly funded resources is 150 days as compared to 38.5 days at privately funded services

Mmmm – sounds just like home…..
Global problem – not just in South Africa?

BUT is that an excuse??!
Barriers To Effective Pain Management

Patient Factors

Fear of ailment is getting worse

Concern about not being a “good” patient

Reluctance to take pain medications – fear of addiction

Financial barriers – unable to afford treatment/lack of adequate state facilities
Barriers To Effective Pain Management

Patient Factors

- Fear of ailment is getting worse
- Concern about not being a “good” patient
- Reluctance to take pain medications – fear of addiction
- Financial barriers – unable to afford treatment/lack of adequate state facilities

Healthcare Practitioners

- Poor understanding
- Lack of education

The result?
Yes…It’s just not taken seriously……
So, then, what is Chronic Pain:

**IT IS NOT:**
- simply a symptom of another underlying condition (like acute pain is)
- “protective” DOES NOT
  Serve as warning of underlying condition (as acute pain is)

**IT IS:**
- A medical entity, clinical condition AND **pathology** in its own right (unlike acute pain)
  - **Neuroplasty**
- Destructive, Serving no purpose at all (unlike acute pain)

More Later...
It is obvious, then, that pain can be classified as

**ACUTE**
- Nociceptive from nociceptors
- Neuropathic

**CHRONIC**
- Nociceptive
- Neuropathic

BUT, to complicate things each can be classified as either

What’s the difference?
Chronic Pain as a Pathology???

Basic Premise

• The pathology of chronic pain consists of Altered (facilitated) central pain processing associated with physical changes Manifesting as SPREADING HYPERALGESIA

Basic Physical Changes (neuroplasty)

• Sensitization i.e. Facilitated pain processing:
  a. Periphery – mostly acute and relatively easy to treat
  b. Central nervous system (Spinal Cord – most, and Brain)
    - mostly chronic pain - difficult to treat

• Pro-nociceptive endogenous pain modulation
  Loss of inhibitory descending controls

For example:
Pain

"Gate"

The Interneuron

Touch
Temp
Pressure
Vibration

One example of Neuroplasty – physical change in the CNS
Towards Preventing a USA-like opioid crisis

1. **Knowledge & understanding**

The solution is **NOT**

OPIOID-PHOBIA

Avoiding them, pretending they do not exist

Phobia - *Irrational* Beliefs due to *Ignorance*

Particularly regarding:

**TOLERANCE** **DEPENDENCE** **ADDICTION**
Towards Preventing a USA-like opioid crisis

1. **Knowledge & understanding**

**TOLERANCE**
- Increasing dose to maintain effect – ALL drugs

**DEPENDENCE**
- Withdrawal or rebound on cessation

**ADDICTION**
- Psychological phenomenon (behaviour pattern)
  - 3 elements:
    a. Loss of control - continuation despite knowledge of negative effects
    b. Continuation of use – despite significant untoward life events
    c. Pre-occupation or obsession with obtaining, using, and recovering from the effects of the drug.

We see, then, …NOT everyone who is DEPENDENT is an ADDICT→
Chronic Pain Patients differ from Addicts:

**LOOK Alike – usually confused**

<table>
<thead>
<tr>
<th>Chronic Pain Patients</th>
<th>Addicts:</th>
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<td>They may (will) suffer from side effects, tolerance and, yes, even dependence. If you take their drugs away they will get Withdrawal – due to Dependance.</td>
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- Know the dangers - want to take less drugs – but can’t due to pain rebound or withdrawal.
- Pain patients want sustained pain relief – do not want the rush Slow release drugs.
- Fear drugs will lead to untoward event – e.g. motor accident – want to stop.
- Want improved functioning – want to go to work, family life etc – so need improved pain relief, pain relief, relief.

Even a patient with pain can (and most probably will) develop tolerance & even dependence and will withdraw if stops - but are NOT addicts.

We MUST stop stigmatising Pain Patients by calling them Addicts. They are not...
Towards Preventing a USA-like opioid crisis

1. **Knowledge** & understanding

   We MUST stop stigmatising Pain Patients by calling them Addicts. They are not

1. We must rather offer them some other option
2. We must try pain relief without opioids
3. After torturing them with physio etc…..
Towards Preventing a USA-like opioid crisis

1. **Knowledge** & understanding
   - We MUST stop stigmatising Pain Patients by calling them Addicts. They are not

1. We must rather offer them some other option
2. We must try pain relief without opioids
3. After torturing them with physio etc…..
4. Interventional pain medicine.
Towards Preventing a USA-like opioid crisis

1. Knowledge & understanding

Opiates are NOT FOR CHRONIC PAIN:
Apart from dependence and addiction;
They lose their effect (NOT just tolerance)
Opioid Induced Hyperalgesia OIH
Other side effects –
- Endocrine dysfunction
- Immune suppression
- Nausea, vomiting
- Constipation
- Peripheral oedema
- Sleep apnoea
- Itching (histamine release)
Towards Preventing a USA-like opioid crisis

1. **Knowledge** & understanding
2. Responsible use of opioids for **ACUTE PAIN**
3. Interventional Pain Practice – *Pain relief with less drugs in general*
4. Opioids for Chronic Pain should be the exception NOT the rule
   Judiciously administered by pain clinics

**ALL the above require:**

*Education*

*Education*

*Education*

*And Above all….*

By who?

SAMA?

I think so
Somebody

who takes chronic pain seriously....

because they understand it...

Even if they themselves, or a loved one,

does not suffer with it...
A whole lot of numbers and figures
BUT
TAKE HOME MESSAGE
CHRONIC PAIN IS
A HUGE PROBLEM – MOST LIKELY THE BIGGEST PROBLEM IN MEDICINE
BUT…
IT’S GETTING THE LEAST ATTENTION
Remember:

A famous quote:

Edmund Burke once said,
For evil to succeed,
it is only necessary
for good men to do nothing. ..
Remember: - “modified “famous quote… by me

For pain to continue to destroy millions of lives… it is only necessary that GOOD people (us) do nothing……..

Thank you

rpr@mweb.co.za
give me a call
012 3 444 198
Pain Transmission

3 Neurons Involved in pain perception

1. Primary Neuron
   Transduction
   Peripheral Transmission

2. Secondary Neuron
   Central Transmission

3. Tertiary Neuron
   Central Transmission
   Perception

Ist Synapse in Dorsal Horn

UN-myelinated - C
'Slow Pain'
Myelinated - Aδ
'Fast Pain'

Brainstem

Cerebrum via Post. Thalamus

Nociceptors
“Wind up”, or, Central sensitisation

\[ \text{Physical changes in dorsal horn} \]

\[ \text{Altered Pain Processing} \]

\[ \text{Facilitated pain transmission (gate open)} \]

Increased perception of pain – hyperalgesia and, even, origination of new pain impulses