



CONFESSIONS OF A PAIN SPECIALIST: WHAT I WISH I HAD BEEN TAUGHT

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WHAT MY PATIENTS TELL ME



I SAW THIS DOCTOR/PHYSIO/SURGEON WHO TOLD ME THAT THIS PAIN SHOULD HAVE GONE IN X MONTHS

THE SURGEON SAID HE HAD NEVER SEEN SUCH SEVERE ARTHRITIS IN HIS CAREER BEFORE.

THIS SURGEON SAID THAT MY SPINE WAS ALREADY CRUMBLING LIKE A DIGESTIVE BISCUIT





I WAS TOLD THAT THIS ACCIDENT ADVANCED THE
CHANGES IN MY (SPINE/KNEE/HIP) BY 10 YEARS



**THE PROBLEM
IS WE DON'T
KNOW WHICH
50% IS
WRONG**



**50% OF WHAT
WE STUDIED
IN MEDICAL
SCHOOL IS
WRONG**



SIX PILLARS OF LIFESTYLE MEDICINE



Mental Wellbeing



Healthy Relationships



Physical Activity



Healthy Eating



Sleep



Minimising Harmful
Substances



ESSENTIAL FOR DIABETES, OBESITY, HYPERTENSION
KIDNEY DISEASE, MENTAL HEALTH



PLAN FOR TODAY



WHY WE NEED TO REFRAME PAIN



RECENT ADVANCES AND COMPLEXITY



TREATMENT STRATEGIES

THE NEED TO REFRAME



NEW SCIENCE AND FACTS

KNOWLEDGE
BASE

NEUROSCIENCE

ACCESS

ACCESS TO
TREATMENT

MEDICATION
CONCERNS



NEW SCIENCE AND FACTS



EPIDEMIC
OR
PANDEMIC?

**More people suffering from
CHRONIC PAIN than stroke
and diabetics put together!!**

UK PREVALENCE FIGURES
DM 5.3 MILLION BY 2025
STROKE 1 MILLION
CVD 7 MILLION
PAIN 28 MILLION (14 MILLION)



REALITY

- 1 out of 5 suffer from chronic pain
- 28 million adults ie 43% of UK population suffer from pain (2016 STUDY)
- 1 out of 5 surgical patients end up with pain
- Medical school teaching about pain (<12hrs in 5 years on average)
- Our own beliefs about pain

A NEW UNDERSTANDING AND REFRAME OF PAIN IS NEEDED



- **How do I know if my pain system is being overprotective?**
- **How do I retrain my system to be less protective?**
- **How do I know if I am safe to move?**



MUERI et al. March 2021

***Despicable Me 2,
The Secret Life of Pets,
Toy Story 3 and 4,
Incredibles 2, Inside Out,
Up,
Zootopia,
Frozen,
Finding Dory,
Sofia the First,
Shimmer and Shine, Paw Patrol, Octonauts, Peppa
Pig and Daniel Tiger's Neighbourhood.***



- ✓ Pain was frequently depicted, ~9/hr. ~80% - seriously injured.
- ✓ Medical and procedural pain, like needles, as well as chronic pain <1%
- ✓ Characters rarely (<10%) asked for help - perpetuating an unrealistic and distorted perception of pain
- ✓ 75 % pain - witnessed, - No empathy



Boys - majority of pain. In REAL LIFE – girls suffer more.

RELEVANCE? Is girls' pain is less frequent, real and worthy of attention?

Girls – less likely to seek help when they experienced pain than boys.

OUR PRECONCEIVED ASSUMPTIONS AND BELIEFS

IS PAIN AN EMOTION OR A SENSATION?



An unpleasant sensory and emotional experience associated with, or resembling that associated with, actual or potential tissue damage. (IASP 2020)

1. Pain is always a personal experience that is influenced to varying degrees by biological, psychological, and social factors.
2. **Pain and nociception are different phenomena.**
3. **Through their life experiences, individuals learn the concept of pain.**
4. A person's report of an experience as pain should be respected.
5. **Although pain usually serves an adaptive role, it may have adverse effects on function and social and psychological well-being.**
6. Verbal description is only one of several behaviours to express pain

CYBERBALL EXPERIMENT

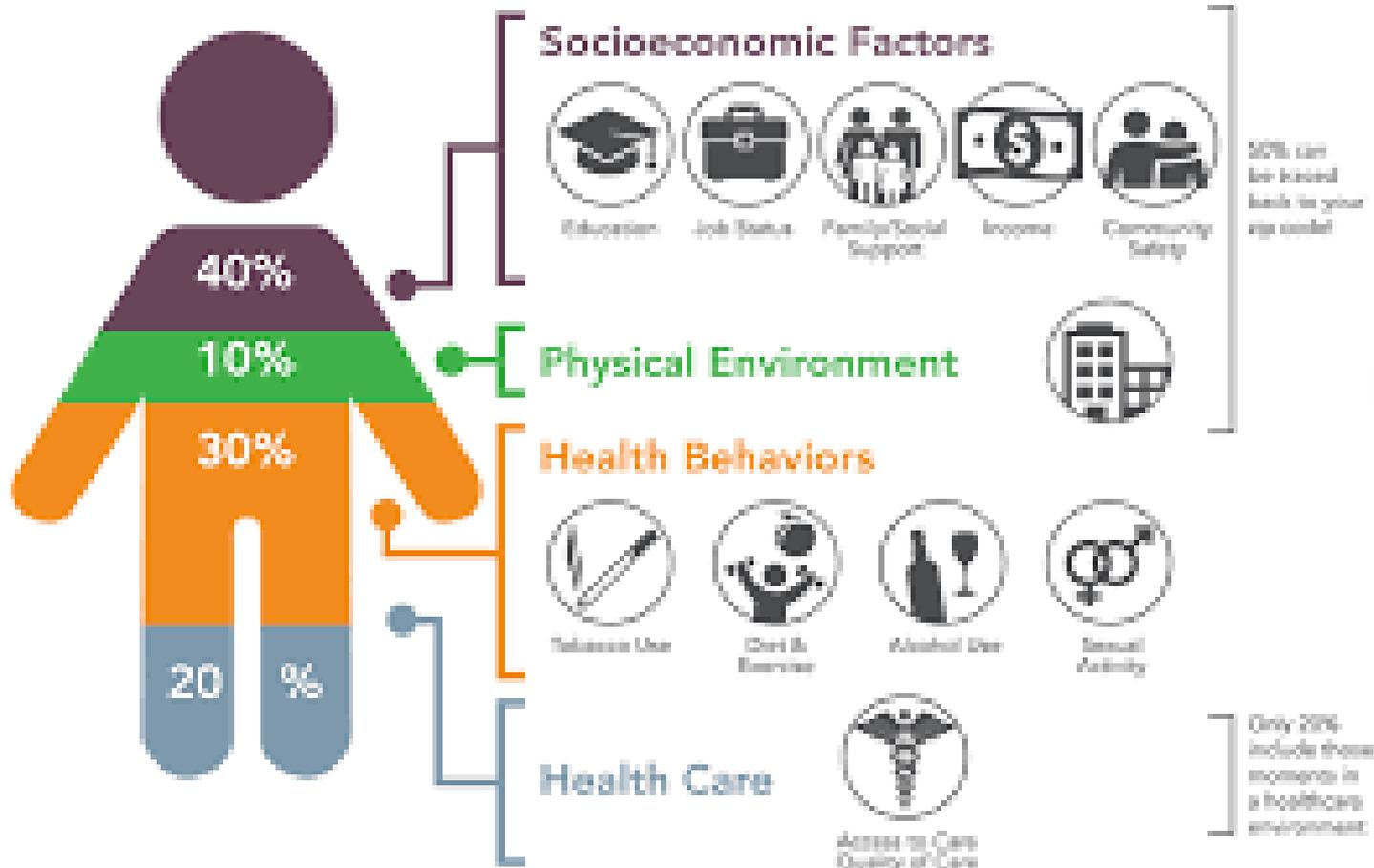


AREAS OF BRAIN OVERLAP IN TERMS OF FUNCTION
THE BRAIN CAN'T DISTINGUISH BETWEEN EMOTIONAL AND PHYSICAL PAIN

on
ical

SCIENCE 2003

BULLYING, WORK PRESSURES,
LOSS/DIMINISHING SOCIAL
SUPPORT/LIFE CONTEXT AS AGING
OCCURS



Source: Institute for Clinical Systems Improvement, Going Beyond Clinical Work: Solving Complex Problems (October 2014)



**NOTHING IN BIOLOGY MAKES SENSE EXCEPT IN THE LIGHT OF
EVOLUTION**
Dobshansky 1973



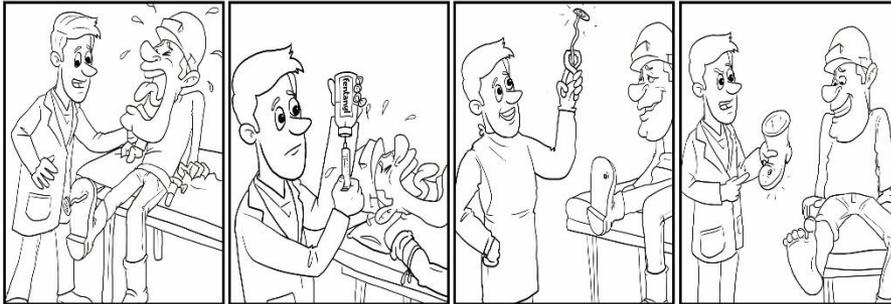
2 GOLDEN TRUTHS



GOLDEN TRUTH 1 ALL PAIN IS REAL

(IT IS NOT IN YOUR HEAD)

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THANKS TO MATT DEL BROCO

A PAINFUL TOE NAIL



Fisher JP et al. *BMJ* 1995;310:70



PAIN IS THE BODY'S ALARM SYSTEM

A PROTECTION SYSTEM PAR EXCELLENCE
BUT SOMETIMES NOT PERFECT

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GOLDEN TRUTH 2 NOCICEPTION AND PAIN

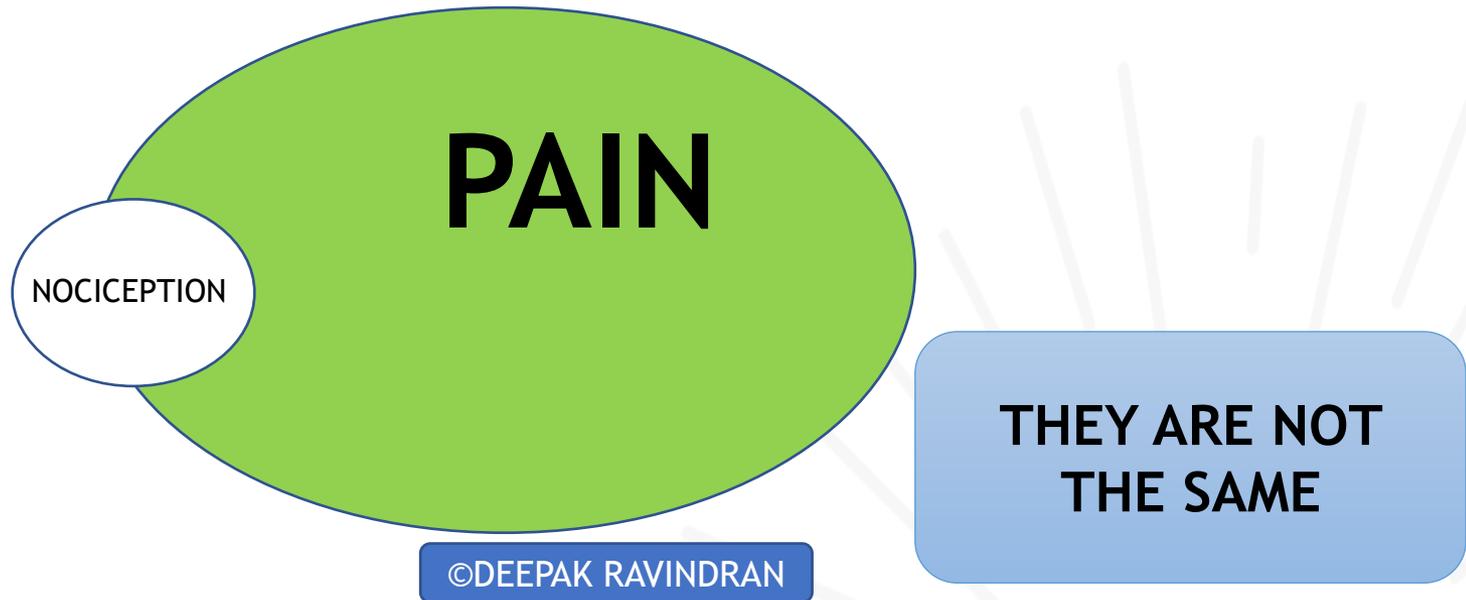
THEY ARE NOT THE SAME



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PAIN AND NOCICEPTION





PREDICTION AND PROTECTION MACHINE

WHAT ELSE DOES THE BRAIN SEEK TO PROTECT AGAINST?
INTERNAL
EXTERNAL
THREATS OF THE DISTANT PAST - ACES

SITE OF INJURY



AREA OF INFLUENCE



MODULATION

THE BRAIN & SPINAL CORD

PROCESSING AND PREDICTION

Channels that dampen pain

Channels that amplify pain

FROM THE PAIN FREE MINDSET
@DEEPAK RAVINDRAN

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PAIN AND NOCICEPTION



QUESTIONS TO ASK

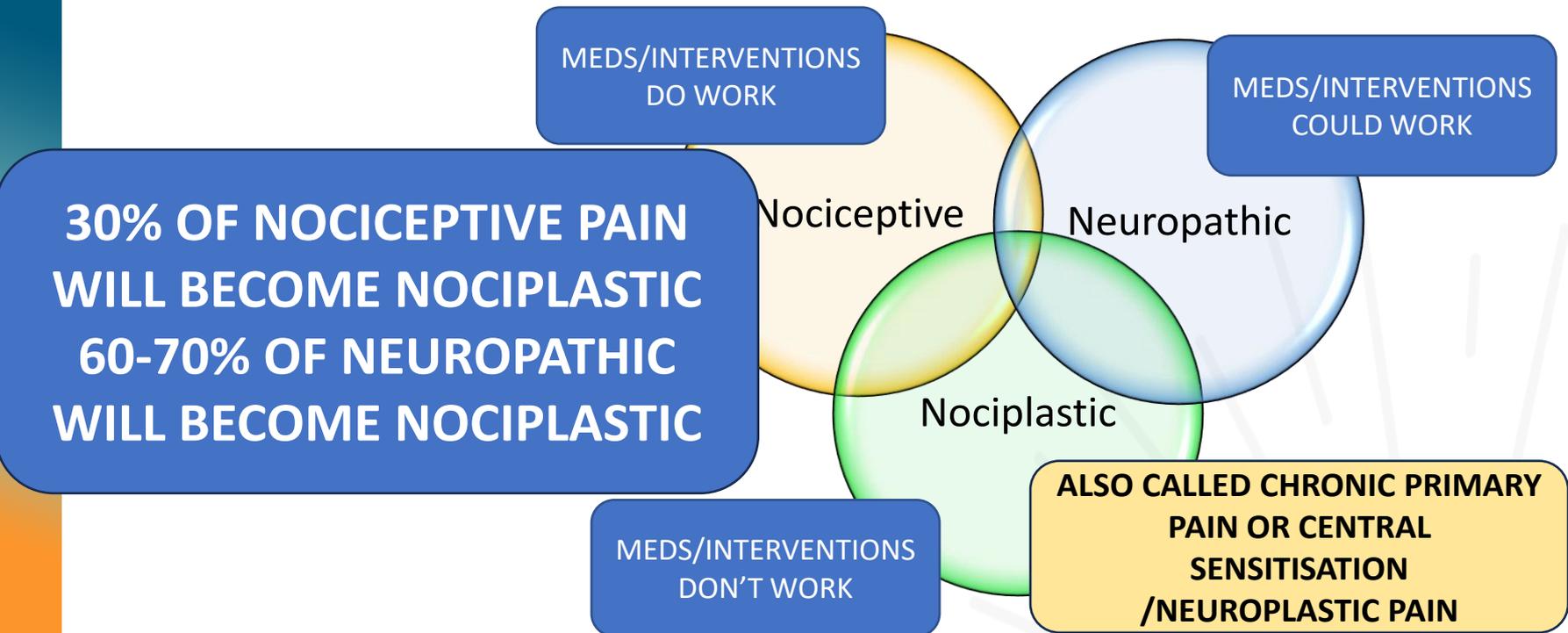


HOW MANY KINDS OF PAIN ARE THERE?



WHAT WORKS BEST FOR WHICH TYPE OF PAIN?

The 3 types of pain





**HOW DO YOU CALM A
OVERPROTECTIVE NERVOUS
SYSTEM?
AND IMMUNE/ENDOCRINE
SYSTEM?**

HIGH QUALITY PAIN CARE



TRAUMA INFORMED CARE



PAIN FREE MINDSET



PAIN MANAGEMENT PROGRAMS

The Berkshire Pain Clinic Roadmap

We help people struggling with physical and mental pain by getting to the root of the problem and removing the barriers to healing so that they have more hope and control over their life... even if they've tried pills, surgery, or literally everything else and don't know what to do next.

PHASE 3 FLOURISH



Hormone Health



Emotional & Mental Health



Resilience & Regenerative Medicine



PHASE 2 FIX



Sleep & Stress Management



Functional Movement



Nutrition & Gut Health



PHASE 1 FOUNDATION



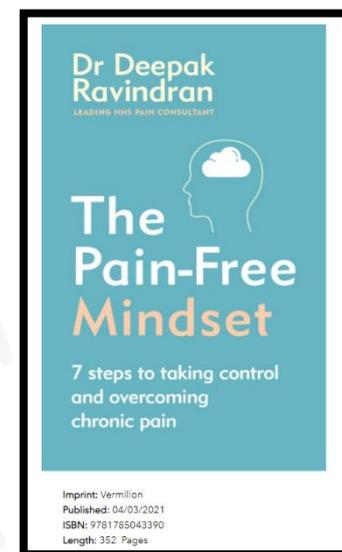
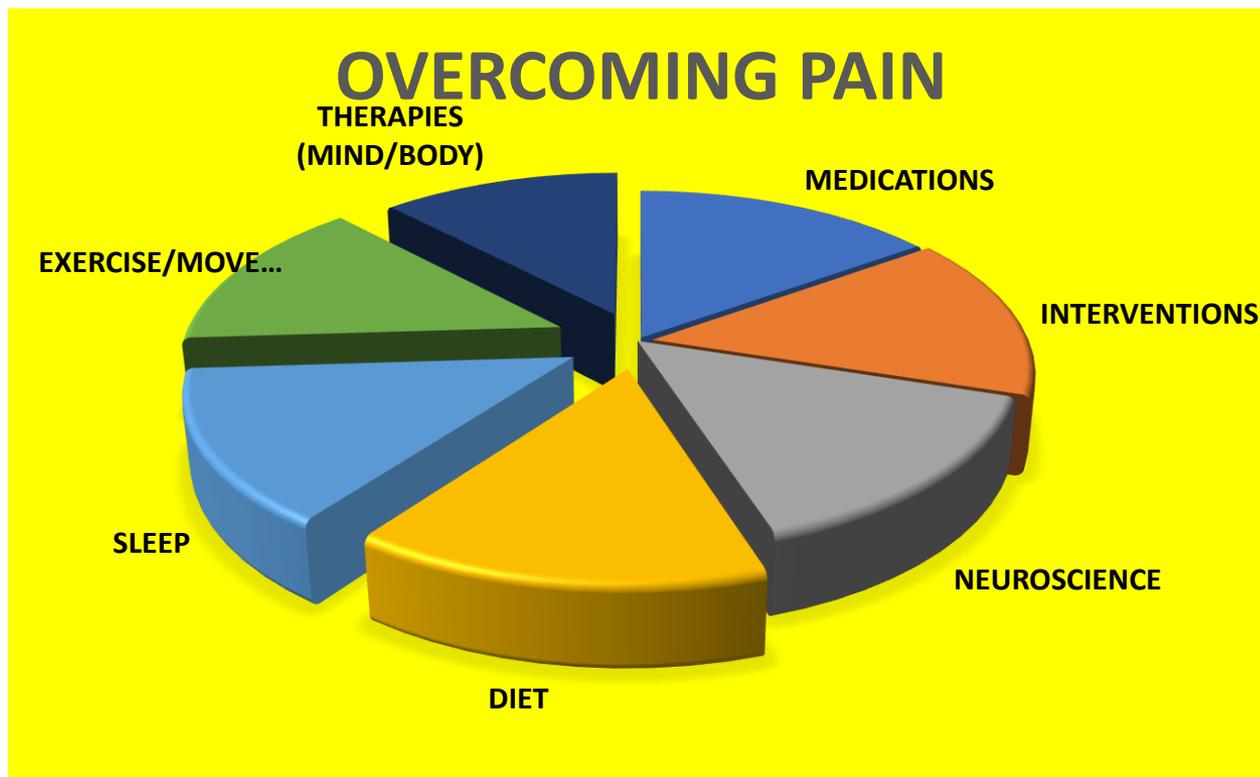
Intake & Review



Advanced Lab Testing

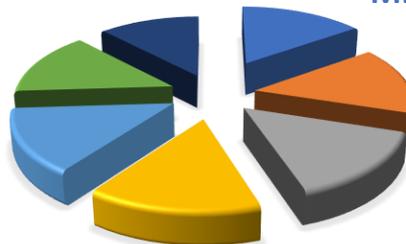


Acute Pain Control





MEDICATIONS



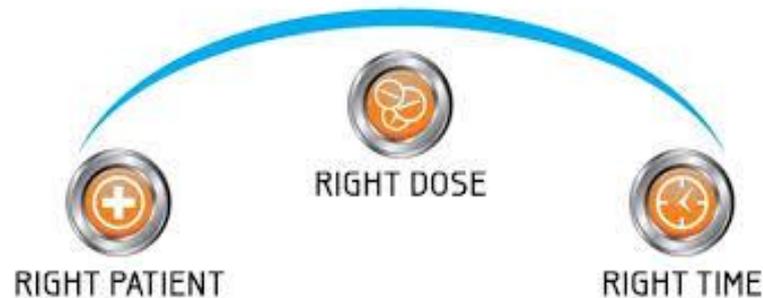
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MEDICATION STRATEGY

Do they work?

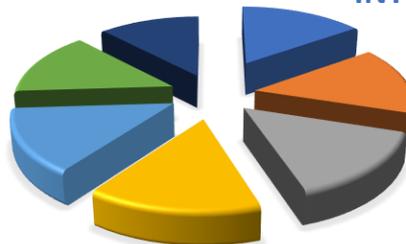
- **ABSOLUTELY**
- **BUT only when the selection is right**

- **All drugs have side effects**
- **Trial and error and patience and specialist support and knowledge**



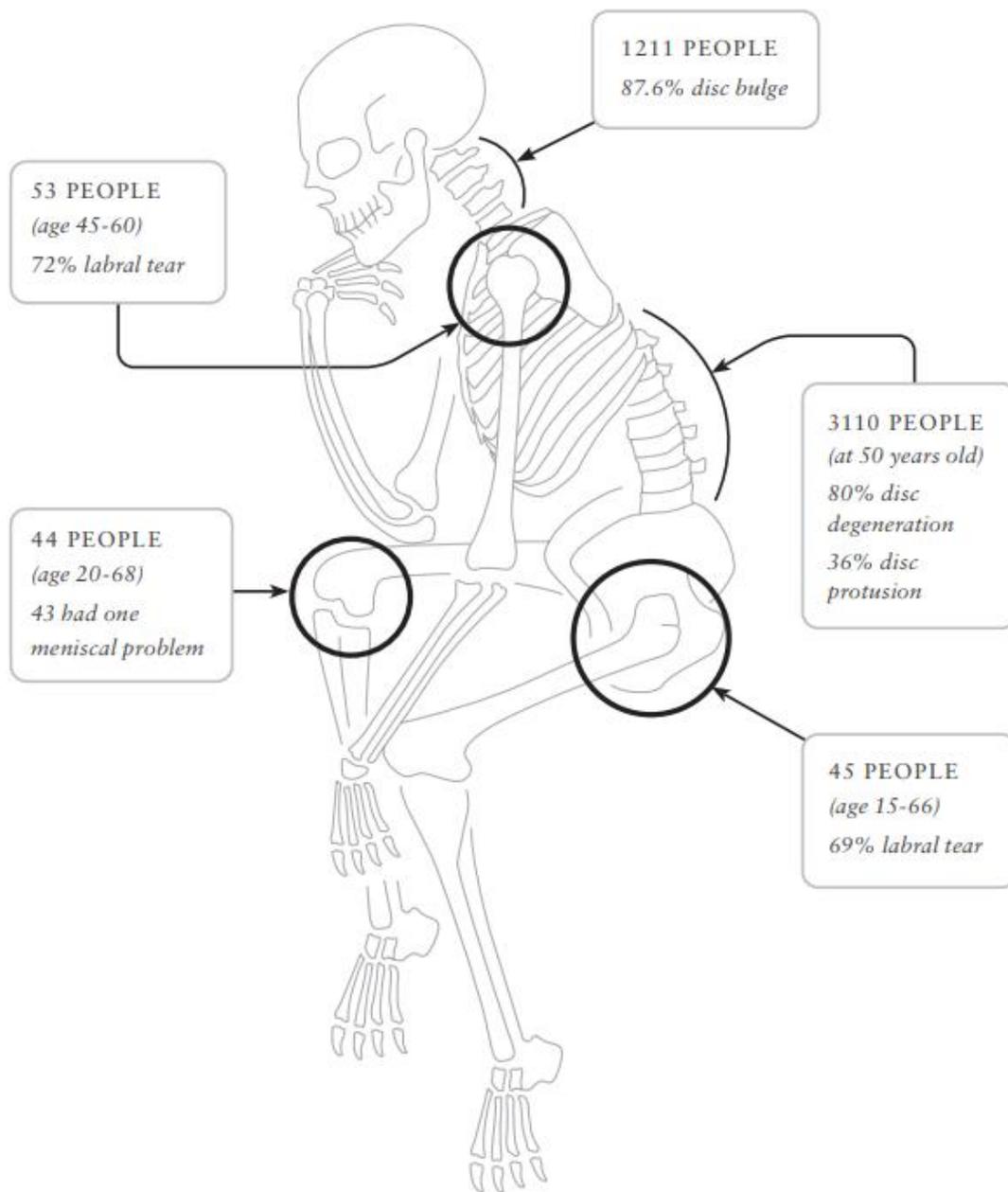


INTERVENTIONS



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INTERVENTIONS



Pic from

Dr Deepak
Ravindran
LEADING NHS PAIN CONSULTANT



The
Pain-Free
Mindset

7 steps to taking control
and overcoming
chronic pain

Imprint: Vermilion
Published: 04/03/2021
ISBN: 9781785043390
Length: 352 Pages

The Pain generator

Did you know
your MRI can
be misleading?

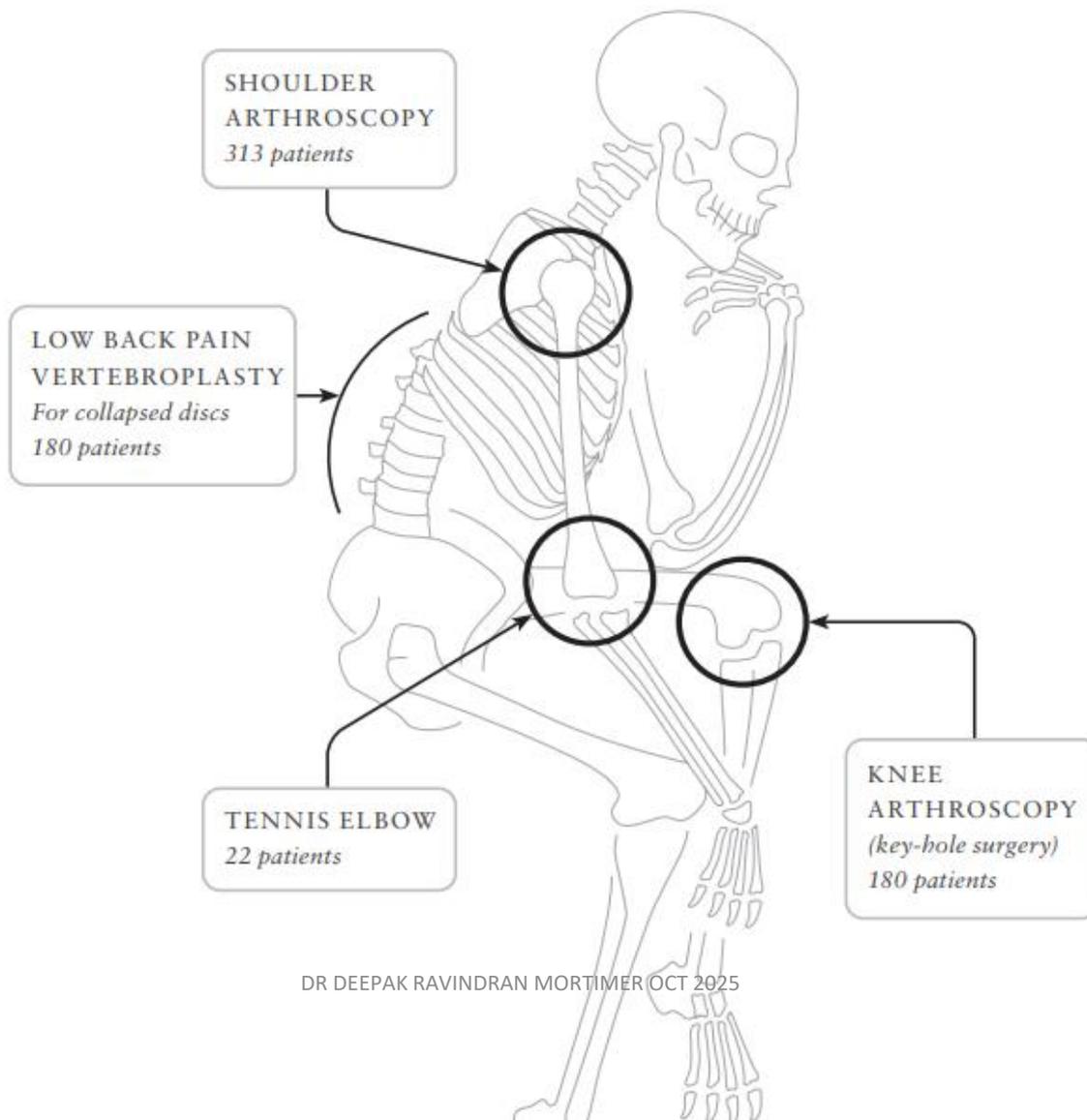


If you take people without back pain
and put them through a CT scan or
MRI, you get some surprising results.

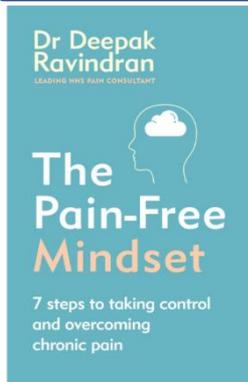
37% of 20 year olds
80% of 50 year olds
96% of 80 year olds
Have "disc degeneration"

30% of 20 year olds
60% of 50 year olds
84% of 80 year olds
Have "disc bulging"

HOW DO WE IDENTIFY BETTER WHO THE RIGHT PATIENTS ARE ?



Pic from



Imprint: Vermilion
Published: 04/03/2021
ISBN: 9781785043390
Length: 352 Pages

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B

- BENEFITS OF THE PLANNED INTERVENTION OR INJECTION

R

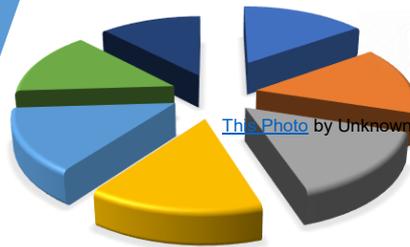
- RISKS OF THE PROPOSED PROCEDURE

A

- WHAT ARE THE ALTERNATIVES

N

- WHAT IF YOU DO NOTHING ?



DIET/NUTRITION



**Whatever happens in
Vagus, does not stay
there..
JOHN CRYAN**



WHAT HAPPENS IN THE VAGUS...

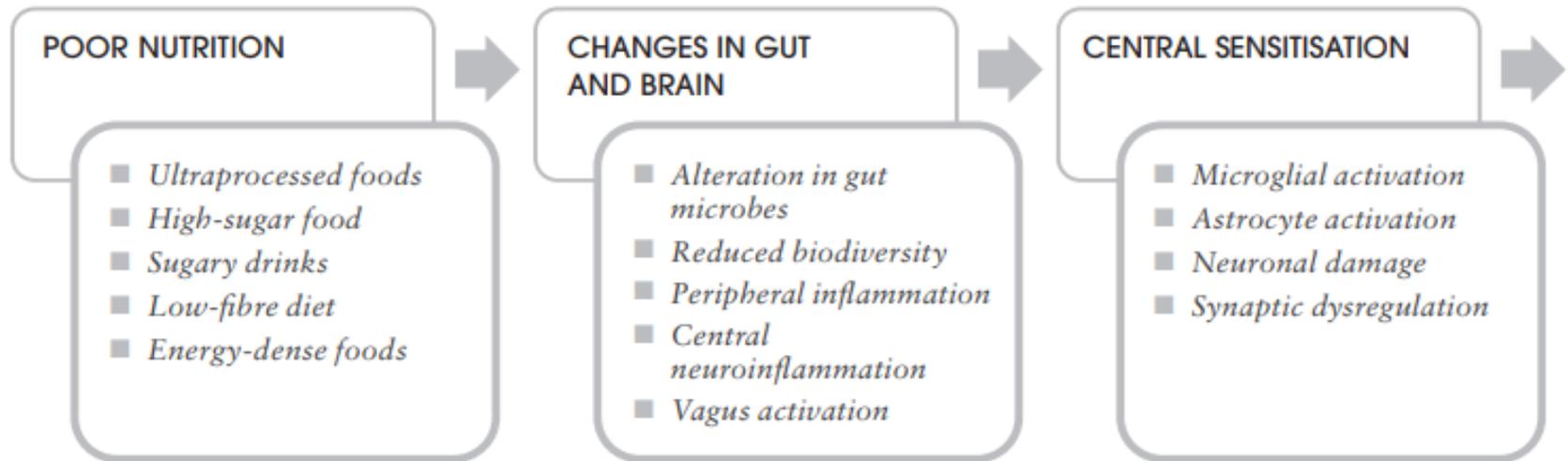
- Brain gut endocrine axis
- Interoceptive (INSIDE THE BODY) information
- State of the gut is responded to brain by vagus nerve
- Similarly brain and emotions are responded to by gut

Huge sensory information transfer makes the gut brain axis the **true supercomputer**

Largest



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Nutrition related health in pain patients

- Underweight and obesity : both are a challenge
- Comorbidities:
 - >60% pain patients have 2 or more LTCs
 - DM/CVD – 1.5-2x more chronic pain
 - INFLAMMATION/OXIDATIVE STRESS is factor in many other medical conditions
- Eating behaviours: impact of reduced mobility and disturbed sleep, isolation and MH issues





TOP TIPS



REDUCE PRO
INFLAMMATORY
FOODS



ADD IN ANTI
INFLAMMATORY
FOODS



1- 1.5 LITRES OF WATER
PER DAY



CONSIDER
SUPPLEMENTS/PREBIOT
ICS/PROBIOTICS/IF

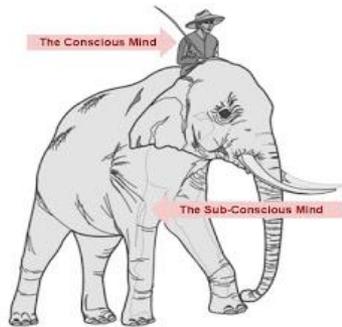


CONSIDER GIVING
YOUR GUT TIME TO
SELF HEAL SO EAT
WITHIN 8-12 HOUR
WINDOW

THE ELEPHANT IN THE ROOM



**The role of Trauma – BIG AND SMALL
THE IMPACT ON OUR NERVOUS AND
IMMUNE SYSTEM**
Adverse childhood experiences



TRAUMA : A normal response to abnormal events
3 common themes

- Person was unprepared
- Trauma was unexpected
- Nothing could be done to prevent it

Trauma is not what happens to you; trauma is what happens inside you as a result of what happens to you.



GABOR MATE

ACEs study 1996

ABUSE



Physical



Emotional



Sexual

NEGLECT



Physical



Emotional

HOUSEHOLD DYSFUNCTION



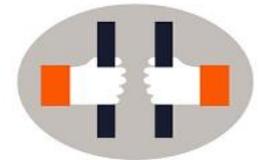
Mental Illness



Mother treated violently



Divorce



Incarcerated Relative



Substance Abuse



WHAT THAT MEANS FOR EVERY 100 PEOPLE

16-20% > 4 ACES

1 IN 6
SMOKING/ALCOHOLISM (3
TIMES MORE)

STROKE/DIABETES/CANCER

RESPIRATORY/LIVER
DISEASE

1 IN 6 HAS HEART DISEASE
(2.5 TIMES MORE)

1 IN 5 ATTEMPT SUICIDE (20
TIMES MORE)

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Adult victims of childhood maltreatment report

- greater pain and headaches,
- gastrointestinal and respiratory symptoms,
- gynecological problems,
- neurological symptoms and
- overall physical problems and
- visits to health professionals.

In general, individuals who report a history of abuse

- GREATER SYMPTOMS SEVERITY
- MORE MEDICAL HEALTHCARE UTILIZATION
- MORE SURGICAL PROCEDURES
- 2.7 TIMES HIGHER INCIDENCE OF CHRONIC PAIN AS COMPARED TO SOMEONE WITH NO ACES



Be trauma informed and ACE aware

- **REALISE:** ASK NOT “WHY ARE YOU LIKE THIS” but “ WHAT HAPPENED TO YOU?”
- **RECOGNISE:** Validating the trauma and listening – reduced tests, procedures and harm
- **RESPOND:** Engage and influence/challenge your colleagues/spouses/partners and HCP, Collaborate with public health and others in hospital/primary care specialities/DWP
- **RESIST** Retraumatization: communication in a compassionate/avoid fearful statements



THE FLARE UP PLAN

1. Have you been involved in an injury/surgery? YES/NO
2. Visible swelling with fever etc? YES/NO
3. Been overdoing something? YES/NO
4. Any source of stress? YES/NO
5. Change in diet last few days? YES/NO

**IF YOUR ANSWERS TO Q1 AND Q2 ARE NO, THEN
UNLIKELY TO BE ANY NOCICEPTION – SO MEDS AND
INTERVENTIONS UNLIKELY TO HELP**

HARNESSING NEUROPLASTICITY



OLD HABIT

CUE /TRIGGER

PAIN
BEHAVIOUR

AVOIDANCE

CUE /TRIGGER

PAIN
MEDICATION

REWARD

FORMING A NEW HABIT – LATEST NEUROSCIENCE



FORMING A NEW HABIT

FOCUS ON ACTIVITY – 1-2 MIN

TAGGING OF CHEMICALS AND CREATING NERVE CIRCUIT

HARDWIRING IT WITH SLEEP

REWARD IT FOR SEALING THE DEAL

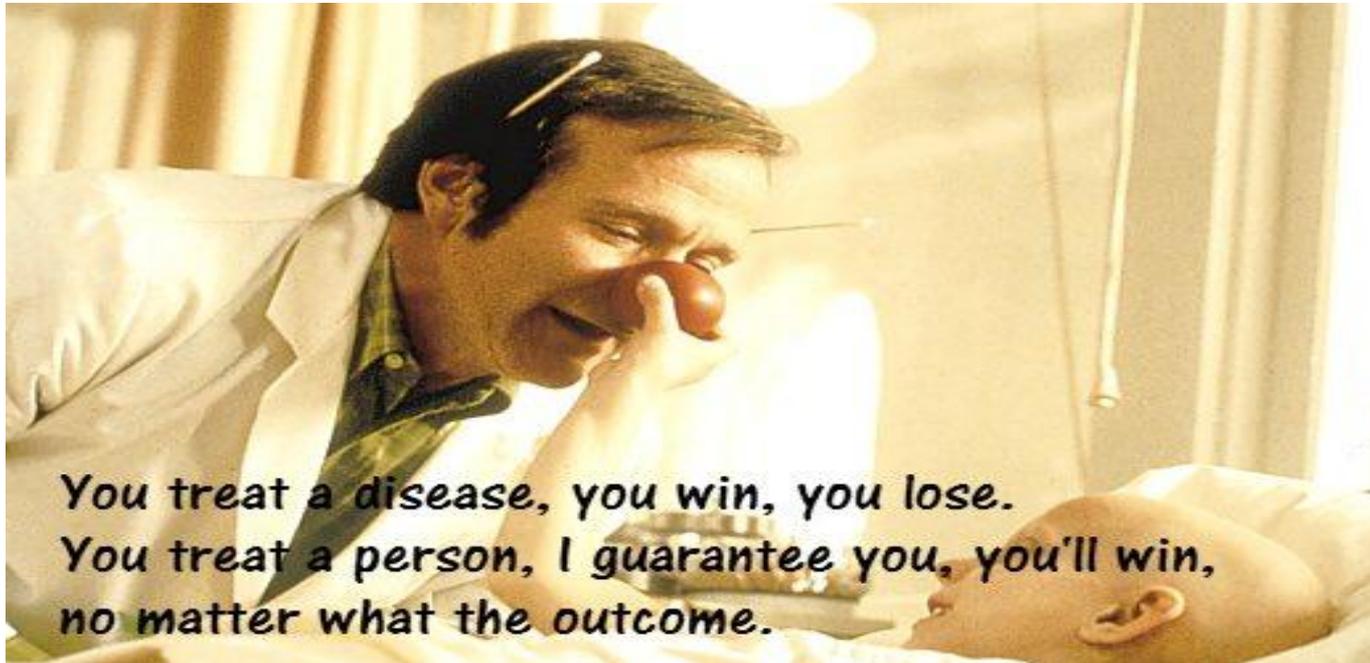
66 DAYS (21 TO 254 DAYS)

BUILDING A NEW HABIT LOOP



STEP 1 CLARIFY A VALUE AND THEN A SERIES OF GOALS	EXAMPLE REDUCE MY PAIN TO GO FOR A WALK WITH FAMILY
STEP 2 EXPLORE OPTIONS AND BRAIN STORM	EXAMPLE SUBDIVIDE INTO TIMES OF THE DAY AND ACTIVITY/CONTEXT SPECIFIC
STEP 3 CHOOSE A FEW THAT YOU CAN/WANT TO DO AND ARE EASY TO DO	EXAMPLE SITTING MIGHT BE EASIER THAN WALKING OR DRIVING
STEP 4 START SMALL	EXAMPLE 2-5 MIN OF SITTING
STEP 5 START WITH A PROMPT	EXAMPLE CONSIDER ANCHORING IT TO SOMETHING YOU ALREADY DO
STEP 6 CELEBRATE SUCCESS	EXAMPLE SOME SMALL CELEBRATION/HIGH FIVE TO STRENGTHEN THE NEW CIRCUIT

An integrated holistic approach – Pain Mgt

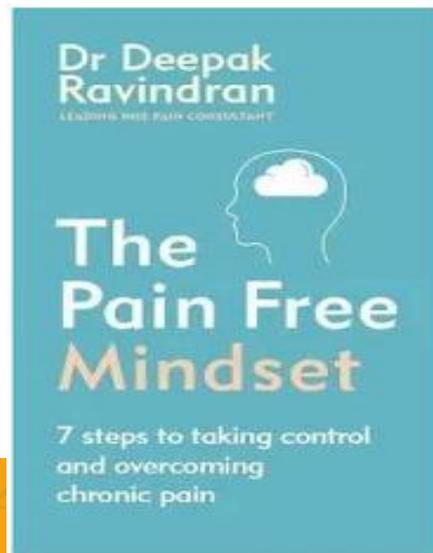


THE POWER OF STORIES - HOPE/RECOVERY



SUMMARY

- PAIN IS A COMPLEX PHENOMENON IN EDS
- OFFER RESOURCES AND SUPPORT USING THE M.I.N.D.S.E.T FRAMEWORK/COACHING APPROACH
- TRUST/RAPPORT AND ALLIANCE GOES A LONG WAY



prof. dr. deepak ravindran



Scan the QR code to submit your feedback

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and get access to a **FREE** Resource Pack:
"Unpack Your Pain" !

deepakravindran.co.uk