

## The Role of the Dentist in Preventing Opioid Abuse Appropriate Use of Opioids in Dentistry

### Orofacial Pain Appropriate Management

**Gary M. Heir, DMD**

Clinical Professor, Director  
Orofacial Pain Clinic  
University of Medicine and Dentistry of New Jersey

## Orofacial Pain Evolving Specialty

- Over the past 30 years, there have been many developments in the field of chronic pain and specifically Orofacial Pain that have lead to the formation of advanced education programs
- Pharmacological management of pain is an integral part of this training



## Most Dentists Don't Treat

- Survey of dental specialists

*"Do you treat or refer patients with chronic TMD and orofacial pain disorders?"*

– Percent of each specialty who chooses to refer

- Oral Surgeons (78%)
- Orthodontists (87%)
- Endodontists (95%)
- Periodontists (96%)
- Prosthodontists (95%)
- Pediatric Dentists (89%)

} = 90%

Look et al, 2000

## Why Refer?

- Not sufficiently trained (78%)
- Patients are too complex (64%)



## To Whom Do You Refer?

*"To whom would you refer your orofacial pain patient?"*

- The results were
  - Oral Surgeons (81%)
  - Orthodontists (94%)
  - Endodontists (88%)
  - Periodontists (80%)
  - Prosthodontists (100%)
  - Pediatric Dentists (92%)



They refer to each other!

## Insufficient Pain Education of Health Professional Students and Graduates

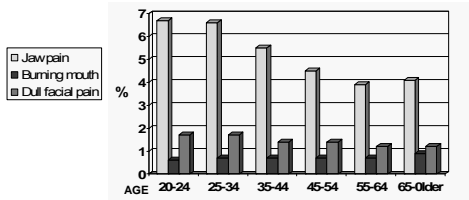
Formal pain content in curriculum

	Total Hours (mean)	Range
Dentistry	15	0 – 24
Medicine	16	0-38
Nursing	31	0-109
Occupational Therapy	28	0-48
Pharmacy	13	2-33
Physical Therapy	41	18-69
Veterinary Medicine	87	27-200

Competency requirements in pain are also limited

A 2007 CPS Survey of Pain Curricula in Health Professional Faculties in Canada \*Wan-Watson et al., 2008

## Abundance of Patients Recognition of the Need



National Health Interview Survey Orofacial Pain Supplement, National Center for Health Statistics

The cost of chronic pain is estimated to be about \$80 billion per year, with as much as 40% associated with orofacial pain

Israel & Scrivani, 2000; Friction & Schiffman, 1995

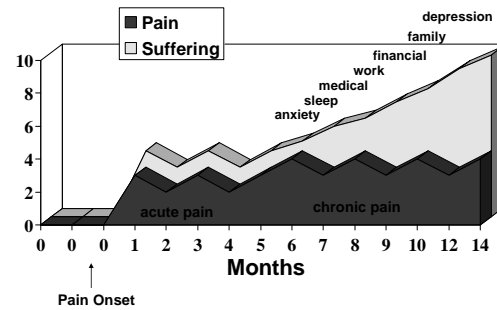
## Psychosocial Impact

- Untreated Pain
  - Loss of family
  - Loss of income
  - Loss of home
  - Search for non conventional or illicit sources for pain treatment

## Economic Impact

- Untreated Chronic Pain
  - Loss of work and productive contribution to society
  - Unemployment
  - Over utilization of the medical and social support systems
    - SSI
    - Medicare
    - ERs, etc

## Acute vs. Chronic Pain and Suffering



## First Line Medications for Neuropathic Pain

- Antidepressant medications
  - Tricyclic antidepressants, especially nortriptyline and desipramine
  - Duloxetine and Venlafaxine
- Calcium Channel A2- $\delta$  ligands
  - Gabapentin and Pregabalin
- Topical lidocaine
  - 5% lidocaine patch

Dworkin et al; Pain. 2007 Dec 5;132(3):237-51  
Pharmacologic management of neuropathic pain: evidence-based recommendations

## Second-line Medications that can be Used for First Line Treatment in Selected Clinical Circumstances

- Opioid analgesics
  - Generally, second-line after patients have not had an adequate response to first-line medications alone and in combination
- Can be used as first-line in select circumstances

Dworkin et al; Pain. 2007 Dec 5;132(3):237-51  
Pharmacologic management of neuropathic pain: evidence-based recommendations

### **Pharmacologic Management of Neuropathic Pain**

- Opioid analgesics may be used alone or in combination with one of the first-line therapies for patients with
  - Acute neuropathic pain
  - Neuropathic cancer pain
  - Episodic exacerbations of severe pain
  - When prompt pain relief during titration of a first-line medication to an efficacious dosage is required

Dworkin et al; Pain. 2007 Dec 5;132(3):237-51  
Pharmacologic management of neuropathic pain: evidence-based recommendations

### **Third-Line Medications for Neuropathic Pain**

- Antiepileptic medications
  - Carbamazepine, Lamotrigine, Oxcarbazepine, Topiramate, Valproic Acid
- Antidepressant medications
  - Bupropion, Citalopram, Paroxetine
- Capsaicin (low concentration)
- Dextromethorphan
- Mexiletine

Dworkin et al; Pain. 2007 Dec 5;132(3):237-51  
Pharmacologic management of neuropathic pain: evidence-based recommendations

### **Conclusion**

- There is substantial body of evidence that orofacial pain disorders are common
- When not adequately managed, substantial disability and suffering results
- This supports the need for improved consistency and quality treatment
- Appropriate use of analgesic medications is necessary in dentistry for treating chronic, complex facial pain disorders