Mississippi State Department of Health

Mississippi Morbidity Report

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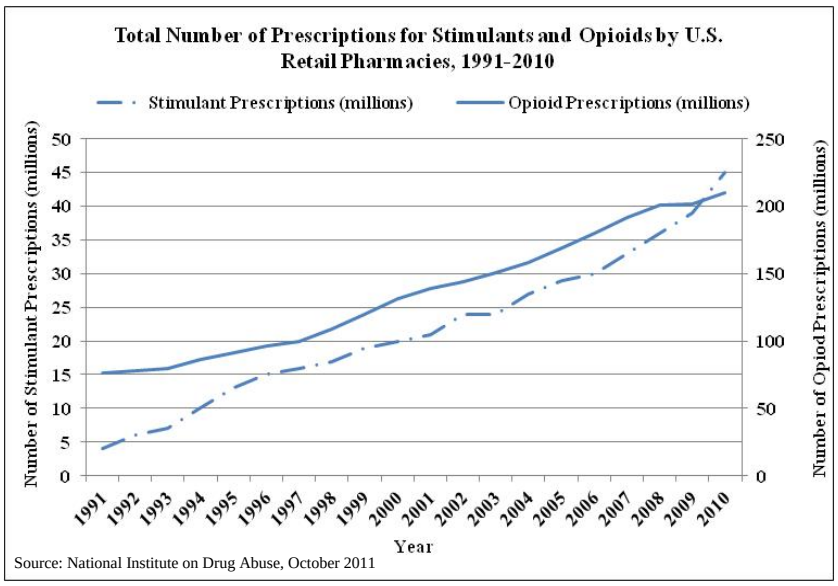
Increases in Prescription Drug Abuse: What can Mississippi Providers Do?

Introduction: Prescription drug abuse, defined as a maladaptive pattern of substance use and characterized by repeated adverse consequences related to repeated abuse of the substance, has been growing at an alarming rate over the last several years. With the increases in prescription drug abuse, unintentional drug overdose deaths more than tripled from 1999 (11,155) to 2008 (36,450) in the US. Although many types of prescription drugs are abused, opioid analgesics (commonly prescribed to relieve pain) are now the most common source of drug overdose deaths in the US, surpassing overdose deaths related to heroin and cocaine combined in 2006. Additionally, US sales of and prescriptions for opioid pain relievers have quadrupled since the late 1990's.

Scope of the Problem: The prescribing patterns for two of the most commonly abused drug classes (opioids and stimulants) have shown marked increases over the last two decades in the US (Figure). The number of prescriptions for stimulants increased from 4 million in 1991 to 45 million in 2010, while the number of prescriptions for opioids increased from 15 million to over 200 million in the same time frame. According to data from a National Institute on Drug Abuse (NIDA) report there were over 210 million prescriptions for opioid pain relievers prescribed in 2010. To bring this number into perspective, there were enough opioids prescribed to medicate every American with 5 mg of hydrocodone every 4 hours around the clock for one month.

Figure



Source: National Institute on Drug Abuse, October 2011

The drug overdose death rate has roughly tripled since the early 1990's, fueled primarily by prescription drug overdoses. According to a Centers for Disease Control and Prevention (CDC) report issued November 2011, there were 36,450 (11.9 deaths per 100,000 population) deaths due to drug overdoses in the US in 2008; 20,044 of the deaths were directly related to prescription drugs. Of the prescription drug overdoses in 2008, opioid pain relievers were implicated in 14,800 (73.8%) of those deaths. The overall drug overdose death rates in 2008 were highest in the 45-54 year old age group (25.3) followed by the 35-44 year olds (20.9) and the 25-34 year olds (16.5).

Additionally, according to the same CDC report, the non-medical use of opioid prescription pain relievers is estimated to cost health insurers up to $72.5 billion dollars annually in direct health care costs. According to the Drug Abuse Warning Network (DAWN), there were approximately 1 million emergency department (ED) visits in 2009 that were attributed to prescription drug abuse. The majority of these visits were related to CNS depressants, accounting for 363,000 visits, followed by opioids which accounted for 343,000 visits. Other medications that were implicated in this report included CNS stimulants (22,000 visits) and non-benzodiazepine sleep aids (29,000 visits). More than half of these ED visits involved persons using multiple agents.

Another dilemma of increased prescription drug abuse is neonatal abstinence syndrome (NAS), a postnatal drug withdrawal syndrome primarily caused by maternal opiate use. The incidence of NAS significantly increased between 2000 and 2009, according to a retrospective study conducted at the University of Michigan, published in 2012. Between 2000 and 2009 the incidence among newborns increased from 1.2 to 3.39 per 1,000 hospital

births per year. This trend mirrors the increase in maternal opiate use during the same time frame, from 1.19 per 1000 hospital births per year in 2000, to 5.63 in 2009.

In Mississippi, there were approximately 180,000 individual prescriptions for hydrocodone products, with over 10 million unit doses prescribed in Mississippi for the month of January, 2013. That's a quantity sufficient for every man, woman and child in Mississippi to receive more than three doses of hydrocodone in that month. The most commonly prescribed controlled substances in Mississippi are presented in the Table below. Since 1990, the number of annual deaths due to unintentional drug overdoses (from Mississippi death certificate data) has increased 10-fold. In 1990 the total number of reported deaths due to drug overdose was 23. This number remained stable until the late 1990's and early 2000's, increasing to more than 100 by 2001. The yearly number has gradually increased over the last 10 years, to 232 in 2011. The highest number of deaths has occurred consistently in the 45-54 year old age group with 31% (379/1229) of the unintentional drug related deaths occurring in this age group from 2007-2011. The 35-44 year old age group accounted for 25% (301/1229) and the 25-34 year old age group accounted for 21% (263/1229) of the deaths in this same time frame.

Table

Top Five Controlled Substances Dispensed in Mississippi January, 2013*

Drug	Total Prescriptions	Total Units Prescribed
Hydrocodone	179,740	10,404,330
Alprazolam	49,600	3,109,115
Zolpidem	41,522	1,366,215
Tramadol	38,302	2,861,468
Clonazepam	26,953	1,563,671

*Source: Mississippi Prescription Monitoring Program

Addressing the Problem in Mississippi: Although there are clear indications for the use of narcotic analgesics, chronic, recurrent use must be approached with caution. Guidelines are available to assist providers in addressing chronic pain syndromes but referral to specialty pain centers may be advisable in many circumstances. As the most direct pathway of obtaining controlled substances, physicians must maintain diligence to prevent improper use.

Identifying the misuse of prescription drugs can be difficult but common characteristics of patients struggling with abuse or diverting medications include: requests for early refills, "lost or destroyed" medications, indicators of intoxication, pressuring behaviors, and multisourcing or "doctor shopping" (the practice of obtaining multiple controlled substance prescriptions from multiple providers). Additionally, people who take high daily doses, low-income people living in rural areas, and people with a history of mental illness are also at risk for abuse of prescription drugs. As prior or concomitant abuse of illicit drugs is a common component of abuse behaviors, routine drug testing can be a mechanism for identifying at risk individuals. The Prescription Monitoring Program (PMP), described in detail below, is a valuable tool for physicians to monitor drug prescription behaviors and can help identify individuals obtaining prescriptions from multiple locations in Mississippi.

In Mississippi, the PMP is a web-based tool designed to comply with the National All Schedules Prescription Electronic Reporting Act of 2005 and is under the control of the Mississippi Board of Pharmacy. The PMP was created to assess prescribing trends and to alert the appropriate authorities of any potential illegal use of controlled substances. These data include all controlled substances Schedule II-V, carisoprodol, tramadol, butalbital and other non-scheduled substances at the discretion of the Board of Pharmacy. Any controlled substance prescribed to a Mississippi resident of sufficient quantity to reach a >48 hours supply is entered into the PMP. The PMP tracks the number of dosage units prescribed, how many different prescribers have written for controlled substances, and how many pharmacies the patient has used to obtain controlled substances. Reports can be generated at any time and are available to any practitioner or pharmacy/pharmacist that submits the required registration to the Mississippi Board of Pharmacy. Currently in Mississippi there are over 2,000 physicians registered to use the PMP.

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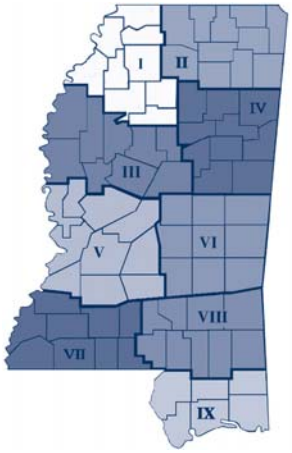

Mississippi
Provisional Reportable Disease Statistics
February 2013

		Public Health District									State Totals*			
		I	II	III	IV	V	VI	VII	VIII	IX	Feb 2013	Feb 2012	YTD 2013	YTD 2012
Sexually Transmitted Diseases	**Primary & Secondary Syphilis**	0	0	0	0	3	0	1	1	3	**8**	14	9	24
	Early Latent Syphilis	4	3	1	2	5	1	0	2	1	**19**	28	20	35
	Gonorrhea	36	35	37	32	108	26	22	30	30	**356**	557	901	1338
	Chlamydia	133	124	163	110	283	118	68	114	137	**1250**	2143	2985	4880
	HIV Disease	7	2	6	4	12	2	2	3	7	**45**	49	80	114
Myco-bacterial Diseases	**Pulmonary Tuberculosis (TB)**	0	1	0	0	3	1	2	1	1	**9**	8	12	15
	Extrapulmonary TB	0	0	0	0	0	0	0	0	0	**0**	0	0	0
	Mycobacteria Other Than TB	2	1	2	3	18	1	4	2	4	**37**	5	68	39
Vaccine Preventable Diseases	**Diphtheria**	0	0	0	0	0	0	0	0	0	**0**	0	0	0
	Pertussis	0	0	0	0	0	2	0	0	1	**3**	8	9	14
	Tetanus	0	0	0	0	0	0	0	0	0	**0**	0	0	1
	Poliomyelitis	0	0	0	0	0	0	0	0	0	**0**	0	0	0
	Measles	0	0	0	0	0	0	0	0	0	**0**	0	0	0
	Mumps	0	0	0	0	0	0	0	0	0	**0**	0	0	0
	Hepatitis B (acute)	0	0	0	0	0	0	1	0	3	**4**	4	10	7
	Invasive *H. influenzae* disease	0	0	0	1	4	0	0	0	0	**5**	4	7	8
	Invasive Meningococcal disease	0	0	0	0	0	0	0	0	0	**0**	0	2	1
Enteric Diseases	**Hepatitis A (acute)**	0	0	0	0	0	0	0	0	0	**0**	0	1	0
	Salmonellosis	0	2	0	4	3	2	0	1	4	**16**	23	51	64
	Shigellosis	0	0	4	1	4	0	0	0	1	**10**	34	24	58
	Campylobacteriosis	0	1	1	0	1	0	0	1	0	**4**	5	8	13
	E. coli O157:H7/STEC/HUS	0	0	0	0	0	0	0	1	1	**2**	0	3	4
Zoonotic Diseases	**Animal Rabies (bats)**	0	0	0	0	0	0	0	0	0	**0**	0	0	0
	Lyme disease	0	0	0	0	0	0	0	0	0	**0**	1	0	1
	Rocky Mountain spotted fever	0	0	0	0	0	0	0	0	0	**0**	0	0	0
	West Nile virus	0	0	0	0	0	0	0	0	0	**0**	0	0	0

*Totals include reports from Department of Corrections and those not reported from a specific District.

In February 2013, the Mississippi State Board of Medical Licensure incorporated changes to its Administrative Code to improve awareness of the issue of prescription drug abuse and to promote physician monitoring of patient medication utilization patterns. Part 2640, Chapter 1 requires all physicians licensed in Mississippi to enroll in the PMP program by December 31, 2013. Part 2610, Chapter 2 now requires all physicians to receive five hours of CME credit hours every two years relating to the prescribing of medications, with an emphasis on controlled substances. Of note, due to concerns about excessive prescribing of hydrocodone, the US Food and Drug Administration's (FDA) Drug Safety and Risk Management Advisory Committee voted January 25, 2013 to recommend rescheduling of hydrocodone from Schedule III to Schedule II. This change would prohibit nurse practitioners and physician assistants from prescribing hydrocodone and prevent refills. This recommendation is currently under FDA review.

Patients should be advised to dispose of controlled substances as soon as they are no longer needed. This can prevent possible theft and diversion. The Drug Enforcement Administration (DEA) sponsors a National Prescription Drug Take-Back Day (the next scheduled April 27, 2013) to provide opportunities for safe prescription drug disposal. Please see the DEA website after April 1, 2013 for collection site locations and for posters and handouts to promote Take-Back Day that can be copied and provided to patients: http://www.deadiversion.usdoj.gov/drug_disposal/takeback/index.html . The FDA also provides information about proper drug disposal for consumers and healthcare professionals at: http://www.fda.gov/forconsumers/consumerupdates/ucm101653.htm#GuidelinesforDrugDisposal .

References on request.

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