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Cassandra Wich

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THE LITTLE "BLACK" PILL: DRESSING UNLIKELY MURDERERS FOR DEFENSE SUCCESS

CASSANDRA WICH*

I.	INT	RODUCTION
	A.	The United States and Antidepressants: A Sad
		Overview932
II.	AM	ERICA'S INTRODUCTION TO THE WONDER DRUG 936
	A.	A Brief History of Antidepressants in the United
		States936
		1. FDA Approval Procedures937
		2. Current, Well-Known Antidepressants on the
		Market938
	В.	The FDA Requires "Black Box" Label on all
		Antidepressants939
	C.	Courts' Responses to Defenses Attempted by Drugged
		Defendants942
III.		ALYSIS
	A.	Homicide – A Basic Overview943
	В.	Involuntary Intoxication Defense: Served Neat or on
		the Rocks?946
	C.	Automatism Defense: Domō Arigatō, Your Honor .950
IV.	Pro	OPOSAL
	A.	Who Should Be Able to Successfully Argue an
		Automatism Defense for Antidepressant-Induced
		Murder?953
	В.	What Can Prove the Drugs Induced the Murder? .954
	C.	110 W Can a Belendant 110 to 1 may the B1 ago included
		Murder?956
	D.	When Courts Do Not Accept Automatism as a
		Complete Defense, What Shall a Defendant Do?958
V.	Co	NCLUSION

I. INTRODUCTION

"I just killed my two daughters . . . I just freaked out . . . I stabbed them," declared David Crespi on the phone with a 9-1-1

^{*} J.D. Candidate, 2015, The John Marshall Law School, Chicago, Illinois; B.A., 2010, University of Denver. I want to thank Erin Wilson for taking me under her wing during my summer at the Fort Collins Public Defender's Office in Colorado. The work you did to help Stephanie not only inspired this Comment but also ignited my passion to become a public defender. To my friends and family near and far: thank you for the continuous support throughout these challenging and fulfilling law school years. I hope to make you proud.

operator.1

"[Lorie Jeror] had come running over here to say her son hit her husband with an ax . . . She thought he was dead," remembered a neighbor, Rick Williams.²

"I shot both boys in the head. I think I shot Jamie twice. I think I shot one of them twice," Leslie Demeniuk purportedly told detectives about her four-year-old twin sons.³

A. The United States and Antidepressants: A Sad Overview

For many Americans, antidepressants have become a prescriptive life support. During the six years from 1988 to 1994, antidepressant usage increased four hundred percent.⁴ An estimated 264 million antidepressant prescriptions were written in 2011.⁵ And now one in every ten Americans over the age of twelve

^{1.} David Lauren CRESPI: David Crespi 9-1-1 Tape Released, MURDERPEDIA (Oct. 4, 2006), http://murderpedia.org/male.C/c/crespi-david-911-call.htm. See also 911 Call, CRESPI FAMILY HOPE, http://www.crespifamilyhope.org/our-journey/horror/ (last visited Mar. 16, 2015) (providing the entire audio of the 911 call made by David Crespi); see also Alison Lynn, Family's "Perfect Life" Shattered, ABC NEWS, http://abcnews.go.com/TheLaw/story?id=4987837&page=1 (last visited Mar. 16, 2015) (retelling the story of David Crespi's battle with his mental health, and how his underlying bipolar disease went undiagnosed and lead to the death of his twin daughters).

^{2.} Denise A. Raymo, Teen Charged in Ax Attack: Son Allegedly Tried to Kill his Father, State Troopers Say, PRESS-REPUBLICAN (Jan. 18, 2005), http://blog.pressrepublican.com/archive/index.php?option=com_content&view=article&id=27109:teen_charged_in_ax_attack:_son_allegedly_tried_to_kill_his_father,_state_troopers_say&catid=34:news-articles&Itemid=64.

^{3.} Trial Begins of Mother Accused of Killing 4-Year-Old Twins, NEWS4JAX, http://www.news4jax.com/news/Trial-Begins-Of-Mother-Accused-Of-Killing-4-Year-Old-Twins/-/475880/1902524/-/lctn4yz/-/index.html (last updated Jan. 4, 2006). See also Leslie Demeniuk, MURDERPEDIA, http://murderpedia.org/female.D/d/demeniuk-leslie.htm (last visited Mar. 16, 2015) (listing numerous other articles and websites detailing Leslie Demeniuk's murder of her twin boys and the role of antidepressants in their deaths). This Comment uses these three stories to demonstrate that taking antidepressants, often in conjunction with other medications, can lead to homicide and violence. Although this Comment focuses on several awful reactions to antidepressants, these are outliers. This Comment should not be understood to question the use of antidepressants all together, but, rather, to increase awareness of the rare effects that can and do occur.

^{4.} NAT'L CTR. FOR HEALTH STATISTICS, HEALTH, UNITED STATES, 2010: WITH SPECIAL FEATURE ON DEATH AND DYING 19 (2011) [hereinafter NCHS, HEALTH, U.S. 2010], available at http://www.cdc.gov/nchs/data/hus/hus10.pdf.

^{5.} IMS HEALTH, NATIONAL PRESCRIPTION AUDIT (2011), cited in IMS INSTITUTE FOR HEALTHCARE INFORMATICS, THE USE OF MEDICINES IN THE UNITED STATES: REVIEW OF 2011 37 (2012), available at http://www.imshealth.com/ims/Global/Content/Insights/IMS%20Institute%20for%20Healthcare%20Informatics/IHII_Medicines_in_U.S_Report_2011.pdf [hereinafter IMS INSTITUTE].

takes an antidepressant.⁶ In 2011, antidepressants became the most dispensed prescription drug,⁷ in turn accounting for \$11 billion in spending on antidepressants in the pharmaceutical industry.⁸ The leaders of this drug revolution are none other than primary care physicians, the "gatekeepers of medical care." Unsurprisingly, an immense variety of antidepressants are available on the market, as demonstrated by the ever-pervasive direct-to-consumer advertisements.¹⁰

Despite this overwhelming demand, more recent scientific studies suggest that antidepressants are only moderately effective in helping with depression. ¹¹ The antidepressants most commonly used and prescribed ¹² are from the selective serotonin reuptake inhibitor (SSRI) ¹³ or serotonin-norepinephrine reuptake inhibitor

^{6.} Laura A. Pratt et al., *Antidepressant Use in Persons Aged 12 and Over: United States, 2005–2008*, NCHS DATA BRIEF (Nat'l Ctr. for Health Statistics, Hyattsville, MD), No. 76, Oct. 2011, at 1, *available at* http://www.cdc.gov/nchs/data/databriefs/db76.pdf.

^{7.} IMS HEALTH, supra note 5.

^{8.} IMS HEALTH, NATIONAL SALES PERSPECTIVES (2011), *cited in IMS INSTITUTE*, supra note 11, at 42. Antidepressants ranked seventh out of the twenty classes listed in the IMS Health's study of "Top Therapeutic Classes by Spending." *Id.*

^{9.} Joseph A. Lieberman III, *History of the Use of Antidepressants in Primary Care*, 5 PRIMARY CARE COMPANION J. CLIN. PSYCHIATRY 6, 6 (2003).

^{10.} See generally Nathan D. Greenslit & Ted J. Kaptchuk, Antidepressants and Advertising: Psychopharamceuticals in Crisis, 85 YALE J. BIOLOGY & MED. 153, 154–57 (2012), available at http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3313530/pdf/yjbm_85_1_153.pdf (arguing how marketing oversimplifies the complex relationship between taking medication and mental illness); Jeffery R. Lacasse & Jonathan Leo, Serotonin and Depression: A Disconnect between the Advertisements and the Scientific Literature, 2 PLoS MED. 1211, 1211 (2005), available at http://www.plosmedicine.org/article/info: doi/10.1371/journal.pmed.0020392 (demonstrating the disconnect by citing to "Zoloft's miserably depressed ovoid creature" advertisements).

^{11.} N. R. Horn, Issues in Treating Depression in Primary Care: The Last Decade has Provided a Better Evidence Base for Treating Depression, 31 CONTINUING MED. EDUC. 46 (2013) (analyzing the effectiveness of antidepressants and explaining that the misreporting of clinical drug trial results by parties with a stake in the outcome leads to further misinterpretation of the data). See also Robert D. Gibbons et al., Benefits from Antidepressants: Synthesis of 6-Week Patient-Level Outcomes from Double-Blind Placebo-Controlled Randomized Trials of Fluoxetine and Venlafaxine, 69 ARCH. GEN. PSYCHIATRY 572, 576–77 (2012) (finding that only one in five treated patients will respond to either fluoxetine or vanlafaxine); but see Konstantinos N. Fountoulakis et al., No Role for Initial Severity on the Efficacy of Antidepressants: Results of a Multi-meta-analysis, 12 ANNALS GEN. PSYCHIATRY 1, 1 (2003), available at http://www.annals-general-psychiatry.com/content/12/1/26 (finding that antidepressants are more effective than placebos).

^{12.} NAT'L INST. OF MENTAL HEALTH, MENTAL HEALTH MEDICATIONS 4 (2010), available at http://www.nimh.nih.gov/health/publications/mental-health-medications/NIMH-Mental-Health-Medications_45027.pdf.

^{13.} See Selective Serotonin Reuptake Inhibitors (SSRIs) Information, U.S. FOOD AND DRUG ADMIN., http://www.fda.gov/Drugs/DrugSafety/Informationby

(SNRI)¹⁴ family of drugs. Further, the myriad of potential, and often realized, side effects caused by antidepressants generates substantial concern.¹⁵ This array of physical health side effects¹⁶ includes diarrhea, nausea, and even loss of libido.¹⁷ Even exceedingly grave and violent "adverse events," ¹⁸ like suicide ¹⁹ and homicide, ²⁰ are occurring more frequently than pharmaceutical companies let on. ²¹ Such risks are magnified when antidepressants

DrugClass/ucm283587.htm (last updated Dec. 23, 2014) (listing the generic and brand name SSRIs approved by the FDA and on the market).

- 14. Diseases and Conditions: Serotonin and Norepinephrine Reuptake Inhibitors (SNRIs), MAYO CLINIC (June 6, 2013), http://www.mayoclinic.org/diseases-conditions/depression/in-depth/antidepressants/art-20044970.
- 15. Roni C. Rabin, A Glut of Antidepressants, N.Y. TIMES, Aug. 13, 2013, at D4, available at http://well.blogs.nytimes.com/2013/08/12/a-glut-of-antidepress ants/?_r=0; see generally John A. Cohan, Psychiatric Ethics and Emerging Issues of Psychopharmacology in the Treatment of Depression, 20 J. CONTEMP. HEALTH L. & POL'Y 115 (2003) (discussing the effectiveness of SSRI antidepressants and whether the numerous side effects are worth the potential, serious risks); May L. Harris, Comment, Problems with Prozac: A Defective Product Responsible for Criminal Behavior?, 10 J. CONTEMP. LEGAL ISSUES 359 (1999) (analyzing the effect of Prozac in the clinical studies and later in the market and discussing the story of William Forsyth, Sr., who stabbed and murdered his wife after ten days on Prozac).
- 16. Elisa Cascade, Amir H. Kalali & Sidney H. Kennedy, Real-World Data on SSRI Antidepressant Side Effects, 6 PSYCHIATRY 16, 16 (Feb. 2009), available at http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2719451/pdf/PE_6_2_16.pdf. The Real-World Data Article sampled a pool of about 700 patients taking an SSRI antidepressant. Id. Of those patients in the survey, thirty-eight percent (229 patients) "reported experiencing one or more side effects as a result of taking an SSRI antidepressant." Id. Out of those patients experiencing at least one side effect, astonishingly, "only [forty] percent of patients mentioned the side effects to their prescribing physicians." Id.
- 17. CONSUMER REPORTS, BEST BUY DRUGS 10, 21–23 (2013), available at http://www.consumerreports.org/health/resources/pdf/best-buy-drugs/Antidepressants_update.pdf.
- 18. See generally Norman M. Goldfarb, Adverse Event Terminology, 8 J. CLINICAL RESEARCH BEST PRACTICES 1 (2012), available at http://firstclinical.com/journal/2012/1207_Adverse.pdf (listing different definitions of "adverse event" created by United States agencies and institutes and international organizations). The Code of Federal Regulations provides the working definition of "adverse event" that the FDA uses. Under that definition, an "adverse event" is "any untoward medical occurrence associated with the use of a drug in humans, whether or not considered drug related." 21 C.F.R. § 312.32 (2013).
- 19. See generally W. Creaney et al., Antidepressant Induced Suicidal Ideation, 6 HUMAN PSYCHOPHARMACOLOGY 329 (1991), available at http://www.davidhealy.org.php53-23.dfw1-1.websitetestlink.com/wp-content/uploads/2012/05/1991-Creaney-Healy-Prozac-Suicide1.pdf (exploring the occurrence of suicidal ideation in people who had been taking antidepressants for just a matter of days).
- 20. Joseph Mercola, *He Murdered a Friend after Taking this Best-Selling Drug*, MERCOLA (Feb. 25, 2012), http://articles.mercola.com/sites/articles/archive/2012/02/25/legal-system-rules-antidepressants-cause-kids-to-kill.aspx.
- 21. John LaMattina, Can Pharma Hide Side Effects of Marketed Drugs in the U.S.?, FORBES (Sept. 3, 2013), http://www.forbes.com/sites/johnlamattina/2013/09/03/can-pharma-hide-side-effects-of-marketed-drugs-in-the-u-s/

are used as part of a "cocktail" with other drugs.²² Essentially, doctors are handing their patients' "ticking time bombs" with only a simple signature on their prescription notepads.²³

The three stories of death and tragedy referenced at the start of this Comment represent a small sample of the many such heinous occurrences. ²⁴ Criminal consequences logically stem from instances where antidepressant-prescribed patients suffer from adverse events that result in violence. ²⁵ Over the past couple of decades, courts have been exposed to evidence that these drugs contribute to, or even solely cause, violent behaviors and mental states. ²⁶ But criminal defendants have largely been left to suffer the consequences of these rare side effects with no hope for justice in the courts.

This Comment explains how the commonly prescribed SSRI

(demonstrating the commentary that erupts around antidepressant side effects and how much the pharmaceutical companies actually report to consumers); Gardiner Harris, *Spitzer Sues a Drug Maker*, *Saying it Hid Negative Data*, N.Y. TIMES (June 3, 2004), http://www.nytimes.com/2004/06/ 03/business/spitzersues-a-drug-maker-saying-it-hid-negative-data.html?pagewanted=all&src=pm (reporting on GlaxoSmithKline's failure to warn doctors that Paxil can cause suicide in young adults, the choice to promote the prescribing of Paxil to adolescents, and the FDA's subsequent decision to require black box label warnings on Paxil).

Federal law requires that pharmaceutical companies report adverse drug experiences both during and after approval. 21 C.F.R. § 312.32 (2013). Also, there exists a variety of reporting websites that are not tied directly to pharmaceutical companies or the FDA. MEDIGUARD, https://www.mediguard.org (last updated Nov. 1, 2013) (providing a resource for patients to engage in research on prescriptions by reported side effects, satisfaction with drugs (or lack thereof), and other feedback); RXISK, https://www.rxisk.org (last visited Mar. 19, 2015). But reporting rates sometimes remain low. Cascade, *supra* note 16, at 16 (finding that "only [forty] percent of patients mention the side effects [of antidepressant use] to their prescribing physicians").

- 22. See Carmine Nieuwstraten et al., Systematic Overview of Drug Interactions with Antidepressant Medications, 51 CAN. J. PSYCHIATRY 300, 302 (2006) (finding that SSRIs accounted for thirty-two percent of negative drug interactions reported and tricyclic antidepressants accounted for thirty-three percent of negative drug interactions reported).
- 23. Diane E. Hadley et al., Psychiatric Drug Interactions Explored: From the Literature to Clinical Practicality, Feb. 2012 PHARMACY PRACTICE NEWS 7–12, available at http://www.pharmacypracticenews.com/download/ppn0212_ER_WM.pdf.
- 24. See SSRI Stories: Antidepressant Nightmares, SSRO STORIES http://ssristories.org/ (last visited Mar. 27, 2015) [hereinafter SSRI Stories] (listing over 4,800 media articles in which antidepressants are mentioned, many of which detail criminal activity by those taking SSRIs and SNRIs); RXISK, supra note 21 (offering a database of side effects and stories organized by a search of the prescription drug's name).
- 25. Thomas J. Moore et al., Prescription Drugs Associated with Reports of Violence Towards Others, 5 PLoS ONE 1, 2–4 (2010), available at http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.00153 37.
- 26. See Cohan, supra note 15, at 146–58 (describing how courts have seen the appearance of antidepressants in both the criminal and civil arenas).

and SNRI antidepressants, particularly the SNRI Effexor, can cause people to commit murder and proposes how an untraditional but commonly recognized criminal defense should be applied to such people. Part II begins with a brief discussion of how antidepressants were invented and gained sweeping popularity. Part II also highlights a few of the court cases confronting their potential to drive normal individuals to murder. Part III analyzes two defenses, involuntary intoxication and automatism, which a criminal defendant taking antidepressants could raise to avoid being unjustly convicted. After a comparison of these two defenses, Part IV proposes that courts accept automatism as a viable defense for criminal defendants who take Effexor and then commit homicide. Automatism could function as either a complete defense (absolute exoneration) or as a partial defense (sentence mitigation). In giving life to the automatism defense, courts should consider the latest scientific findings about the link between genetic mutations and one's inability to process drugs and the resulting toxic effects.

II. AMERICA'S INTRODUCTION TO THE WONDER DRUG

A. A Brief History of Antidepressants in the United States

During a study to find a treatment for tuberculosis in 1952, scientists made an unexpected discovery.27 They found that iproniazid, an antimycobacterial agent, had psychoactive properties that caused terminally ill patients to respond in positive and optimistic ways.²⁸ This discovery led to the creation of the first class of antidepressant drugs known as monoamine oxidase inhibitors (MAOIs).²⁹ However, MAOIs were not clinically tested for depression for another decade.³⁰ In the meantime, imipramine, which was developed around the same time as iproniazid, became "the first clinically useful tricyclic antidepressant (TCA)." 31 During the 1960s, clinical trials demonstrated that TCAs were better than MAOIs. 32 This decade also saw significant scientific advancement in the understanding of the human nervous system.³³ The "serotonin hypothesis" was born shortly after this better understanding and is now commonly used to explain how a person's serotonin levels seemingly hold the key to their happiness.³⁴

^{27.} Lieberman, supra note 9, at 6.

^{28.} *Id*.

^{29.} Id.

^{30.} *Id*.

^{31.} *Id*.

^{32.} Id. at 7.

^{33.} Id.

^{34.} Id. Joseph Schildkraut posited the "serotonin hypothesis" in 1965 when research indicated that depression occurred because of reduced levels of

From the 1970s into the 1990s, a myriad of new SSRIs were developed and tested.³⁵ In 1988, the Food and Drug Administration (FDA) approved the first SSRI, Eli Lilly and Company's fluoxetine - Prozac was born. ³⁶ The SSRI family of antidepressants was safer ³⁷ and seemed to be more successful in helping patients with depression.38 SSRIs, "the first-line pharmacotherapy for major depressive disorder throughout much of the industrialized world," however, did not treat severe depression as well as some of the earlier developed TCAs. 39 Eventually SNRIs were developed to have the efficacy of prior TCAs but with the "kinder" side effects of SSRIs. 40 As antidepressants became more widely available and safer, psychiatrists continuously lost their role as the main providers of antidepressant prescriptions. 41 Instead, primary care physicians began writing these prescriptions and quickly became "among the most frequent prescribers of new-generation antidepressant medications in the United States."42

1. FDA Approval Procedures

To get FDA approval, a drug company must pass animal testing and then three phases of human clinical trials.⁴³ During Phase One of human testing, the new drug is given to humans to "determine the metabolism and pharmacologic actions of the drug."⁴⁴ Phase Two focuses on the effectiveness of the new drug on patients that have the particular disease or condition the drug is

norepinephrine. Lacasse, *supra* note 10, at 1211. The ultimate version of this theory claimed that the serotonin neurotransmitter holds the key to relieving depression. *Id.* This theory has even affected pharmaceutical companies' television commercials. The cartoon commercials for Zoloft have little balls of serotonin bouncing back and forth between receptors, making the little circle character happy once again. *Id.*; *see also* SuperBowlSammy, *Original Zoloft Commercial*, YOUTUBE, (Mar. 19, 2009), http://www.youtube.com/watch?v=tw hvtzd6gXA.

- 35. Lieberman, supra note 9, at 7.
- 36. Harris, supra note 15, at 360.
- 37. Id.
- 38. *Id*.
- 39. Michael E. Thase, MD, Are SNRIs More Effective than SSRIs? A Review of the Current State of the Controversy, PSYCHOPHARMACOLOGY BULLETIN (July 28, 2008), available at http://www.medscape.org/viewarticle/578077.
 - 40. *Id*.
 - 41. Harris, supra note 15, at 360.
 - 42. Id.
 - 43. Id. at 372.
- 44. 21 C.F.R. § 312.21(a)(1). The purpose of Phase One is also to determine "the side effects associated with increasing doses, and, if possible, to gain early evidence on effectiveness. During Phase [One], sufficient information about the drug's pharmacokinetics and pharmacological effects should be obtained to permit the design of well-controlled, scientifically valid, Phase [Two] studies." *Id.* The number of tested patients is usually between twenty and eighty. *Id.*

supposed to remedy.⁴⁵ Finally, Phase Three incorporates both controlled and uncontrolled studies.⁴⁶ After these studies, the FDA determines whether any further information about effectiveness or safety is needed to "evaluate the overall benefit-risk relationship of the drug."⁴⁷ If not, the FDA determines if the drug receives final approval. If the drug is given final approval, the FDA instructs the manufacturer what particular warnings must be included when marketing the new drug.⁴⁸ From that point forward, the FDA must authorize any future changes to the drug's warning label.⁴⁹

2. Current, Well-Known Antidepressants on the Market

Fluoxetine, advertised under the brand name Prozac, was the first of the many well-known SSRI antidepressants. Today, there are six major SSRIs on the market: citalopram (Celexa),⁵⁰ escitalopram (Lexapro),⁵¹ fluoxetine (Prozac),⁵² fluoxamine maleate (Luvox),⁵³ paroxetine (Paxil),⁵⁴ and sertraline (Zoloft).⁵⁵ These antidepressants are generally the most well-known, as they were heavily marketed from their creation.⁵⁶

- 45. *Id.* § 312.21(b). This section of the code further notes that the study is looking "to determine the common short-term side effects and risks associated with the drug" through a much tighter monitoring process and a bigger pool of patients, around several hundred. *Id.*
 - 46. Id. § 312.21(c).
- 47. *Id.* The Third Phase typically involves several hundred to several thousand participants. *Id.* After this final phase, the FDA will have enough information on side effects, safety, and overall effectiveness to determine what to require on the prescription labeling. *Id.*
 - 48. Harris, supra note 15, at 372.
- 49. See 21 C.F.R. § 314.70 (detailing the process for changing warnings by FDA approval after a new drug's initial approval).
- 50. Citalopram (marketed as Celexa) Information, U.S. FOOD AND DRUG ADMIN..
- http://www.fda.gov/Drugs/DrugSafety/PostmarketDrugSafetyInformationforPatientsandProviders/ucm053339.htm (last updated Nov. 21, 2012).
- 51. Escitalopram (marketed as Lexapro) Information, U.S. Food and Drug Admin., http://www.fda.gov/Drugs/DrugSafety/PostmarketDrugSafetyInformationforPatientsandProviders/ucm053342.htm (last updated Dec. 16, 2014).
- 52. Fluoxetine (marketed as Prozac) Information, U.S. FOOD AND DRUG ADMIN., http://www.fda.gov/Drugs/Drugs/afety/PostmarketDrugSafetyInformationforPatientsandProviders/ucm109352.htm (last updated Dec. 16, 2014).
- 53. Fluvoxamine Maleate Information, U.S. FOOD AND DRUG ADMIN., http://www.fda.gov/Drugs/DrugSafety/PostmarketDrugSafetyInformationforPatientsandProviders/ucm113425.htm (last updated June 26, 2013).
- 54. Paroxetine (marketed as Paxil) Information. U.S. FOOD AND DRUG ADMIN., http://www.fda.gov/Drugs/DrugSafety/PostmarketDrugSafetyInformationforPatientsandProviders/DrugSafetyInformationforHeathcareProfessionals/ucm085313.htm (last updated June 26, 2013).
- 55. Sertraline (marketed as Zoloft) Information, U.S. FOOD AND DRUG ADMIN., http://www.fda.gov/Drugs/Drugs/afety/PostmarketDrugSafetyInformationforPatientsandProviders/ucm053351.htm (last updated Apr. 29, 2013).
 - 56. Thase, supra note 39.

The other major family of antidepressant drugs, SNRIs, was developed throughout the 1990s and early 2000s to provide better results for severe depression than SSRIs, all the while reducing the side effects reminiscent of the older TCAs.⁵⁷ There are currently four FDA-approved SNRIs on the market:⁵⁸ desvenlafaxine (Pristiq),⁵⁹ duloxetine (Cymbalta),⁶⁰ levomilnacipran hydrochloride (Fetzima),⁶¹ and venlafaxine, commonly called Effexor.⁶² Effexor is the focus of this Comment.

B. The FDA Requires "Black Box" Label on all Antidepressants

Suicidal thoughts by patients taking antidepressants were reported as early as 1990.⁶³ Then in the early 2000s, public concern over children and adolescent suicides due to antidepressant use grew substantially.⁶⁴ As the number of children prescribed antidepressants grew, health professionals found throughout

57. Lieberman, supra note 9, at 7, 9; Thase, supra note 39.

58. See generally Carolina Cassels, FDA Approves New SNRI for Major Depression, MEDSCAPE MEDICAL NEWS (July 26, 2013), http://www.medscape.com/viewarticle/808481 (reporting on the fourth FDA-approved SNRI, Fetzima).

59. About Pristiq, PFIZER INC., http://www.pristiq.com/what-is-pristiq.aspx (last visited Mar. 21, 2015); PRESCRIBING INFORMATION, PFIZER INC. (last revised Sept. 2014), available at http://labeling.pfizer.com/showlabeling.aspx? id=497.

60. Duloxetine (marketed as Cymbalta) Information, U.S. FOOD AND DRUG ADMIN., http://www.fda.gov/drugs/drugsafety/postmarketdrugsafetyinformationforpatientsandproviders/ucm114966.htm (last updated Dec. 15, 2014).

61. DEP'T OF HEALTH AND HUMAN SERV., APPROVED DRUG PRODUCTS WITH THERAPEUTIC EQUIVALENCE EVALUATIONS: CUMULATIVE SUPPLEMENT 57 (2015), available at_http://www.fda.gov/downloads/drugs/informationondrugs/ucm086233.pdf. See also PRESCRIBING INFORMATION, FOREST PHARMACEUTICALS, INC. (last revised July 2014), available at http://www.frx.com/pi/Fetzima_pi.pdf#page=1 [hereinafter Fetzima Prescribing Information] (detailing the prescription information and medication guide for those who are considering or already taking Fetzima).

62. Venlafaxine (marketed as Effexor) Information, U.S. FOOD AND DRUG ADMIN., http://www.fda.gov/Drugs/DrugSafety/PostmarketDrugSafetyInformationforPatientsandProviders/ucm106481.htm (last visited Aug. 13, 2010).

63. Id. See generally Anil Nischal et al., Suicide and Antidepressants: What Current Evidence Indicates, 10 MENS SANA MONOGRAPHS 33 (2012) (discussing the possibility of antidepressants' ability to increase the risk of suicide and creating suicidal ideations); Charlotte Björkenstam et al., An Association between Initiation of Selective Serotonin Reuptake Inhibitors and Suicide – A Nationwide Register-Based Case-Crossover Study, 8 PLOS ONE 1 (2013), available at http://www.plosone.org/article/fetchObject.action?uri=info %3Adoi%2F10.1371%2Fjournal.pone.0073973&representation=PDF (finding "an overall increased risk of suicide during the first 28 days of initiation of SSRI therapy").

64. What are the Real Risks of Antidepressants?, HARV. HEALTH PUBLICATIONS (June 9, 2009), http://www.health.harvard.edu/newsweek/What_are_the_real_risks_of_antidepressants.htm [hereinafter HARVARD HEALTH].

various clinical trials that the risk of suicide doubled amongst children, adolescents, and adults when taking an antidepressant. ⁶⁵ The outcry from the public and Congress ⁶⁶ led the FDA to create harsher warnings for antidepressants and issue a news release in October 2004 to the public and all pharmaceutical companies. ⁶⁷ The news release detailed the new FDA requirement for all pharmaceutical companies to add a "black box" ⁶⁸ label warning onto their antidepressants concerning thoughts of suicide or suicide as a potential side effect when taking the drug. ⁶⁹ A black box label is the strongest warning the FDA requires for prescription drugs that pose substantial risks for "serious or life-threatening adverse effects, [as] based on medical studies." ⁷⁰ Every antidepressant on the market has this label on the box and in the medication guide giving directions and information on the prescription drug.

^{65.} Id.

^{66.} HARVARD HEALTH, supra note 64.

^{67.} FDA Statement on Recommendations of the Psychophamacologic Drugs and Pediatric Advisory Committees, U.S. FOOD AND DRUG ADMIN. (Sept. 16, http://www.fda.gov/newsevents/newsroom/pressannouncements/2004/ ucm108352.htm; FDA Launches a Multi-Pronged Strategy to Strengthen Safeguards for Children Treated with Antidepressant Medications, U.S. FOOD AND DRUG ADMIN. (Oct. 15, 2004), http://www.fda.gov/NewsEvents/Newsroom/ PressAnnouncements/2004/ucm108363.htm. See also FDA Proposes New Warnings about Suicidal Thinking, Behavior in Young Adults who take Antidepressant Medications, U.S. FOOD AND DRUG ADMIN. (May 2, 2007), http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/2007/ucm10 8905.htm [hereinafter FDA Proposes New Warnings], (proposing that all antidepressants' black box warnings be updated to "include warnings about increased risks of suicidal thinking and behavior, known as suicidality, in young adults ages 18 to 24 during initial treatment (generally the first one to two months)"); John M. Grohol, The Black Box Warning - Antidepressants and the Risk of Suicide, PSYCHCENTRAL, http://psychcentral.com/blog/archives/ 2007/06/08/the-black-box-warning-antidepressants-and-the-risk-of-suicide/ (last visited Mar. 21, 2015) (arguing that although black box labels and warnings are needed, much more in the way of publicity and press releases needs to occur in order to have any effect in alerting consumers of the side effects); see generally David Healy, Drug Regulation: Did Regulators Fail Over Selective Serotonin Reuptake Inhibitors?, 333 BRITISH MEDICAL JOURNAL 92 (2006), available at http://www.bmj.com/content/333/7558/92 (discussing the concern of antidepressant safety and how regulating agencies were slow to present the data and risks associated with the drugs to the public).

^{68.} A Guide to Drug Safety Terms at FDA, CONSUMER HEALTH INFORMATION (U.S. Food and Drug Admin.), Nov. 2012, at 2, available at http://www.fda.gov/downloads/ForConsumers/ConsumerUpdates/ucm107976.pdf.

 $^{69.\} See\ U.S.\ FOOD\ AND\ DRUG\ ADMIN.,\ CLASS\ SUICIDALITY\ LABELING\ LANGUAGE FOR ANTIDEPRESSANTS AND MEDICATION GUIDE (2005), available at http://www.accessdata.fda.gov/drugsatfda_docs/label/2005/20031s045,20936 s020lbl.pdf.$

⁷⁰ Black Box Warning Resources, AMERICAN SOCIETY OF CONSULTANT PHARMACISTS, https://www.ascp.com/articles/black-box-warning-resources (2015); Staff Writer, FDA Black Box Warnings, DRUGWATCH, http://www.drugwatch.com/2012/01/18/fda-black-box-warnings/ (last modified Nov. 19, 2014).

Today, all six of the SSRIs,⁷¹ all four of the SNRIs,⁷² and all other types of antidepressants⁷³ list suicidal ideation as a potential side effect. The labels also include some mention of violence or aggression that may be associated with taking the antidepressant.⁷⁴ But only Effexor lists a rare adverse event, homicide, on its label.⁷⁵ Effexor, manufactured by Wyeth Pharmaceuticals, Inc., received FDA approval on December 28, 1993.⁷⁶ As noted above, Effexor was

^{71.} As a reminder, the six SSRIs listed from above are Celexa, Lexapro, Prozac, Luvox, Paxil, and Zoloft.

⁷². The four SNRIs listed from above are Pristiq, Cymbalta, Fetzima, and Effexor.

^{73.} Antidepressant Use in Children, Adolescents, and Adults, U.S. FOOD AND DRUG ADMIN., http://www.fda.gov/drugs/drugsafety/informationbydrug class/ucm096273.htm (last updated Dec. 23, 2014).

^{74.} U.S. FOOD AND DRUG ADMIN., CELEXA (CITRALOPRAM HYDROBROMIDE) LABEL (2012), available at http://www.accessdata.fda.gov/drugsatfda_docs/ label/2012/020822s043lbl.pdf; U.S. FOOD AND DRUG ADMIN., LEXAPRO (ESCITALOPRAM OXALATE) LABEL (2012), available at http://www.accessdata. fda.gov/drugsatfda_docs/label/2012/021323s040lbl.pdf; U.S. FOOD AND DRUG ADMIN., PROZAC (FLUOXETINE HYDROCHLORIDE) LABEL (2013), available at http://www.accessdata.fda.gov/drugsatfda_docs/label/2013/018936s100s101,02 1235s021lbl.pdf; U.S. FOOD AND DRUG ADMIN., LUVOX (FLUVOXAMINE MALEATE) LABEL (2012), available at http://www.accessdata.fda.gov/drugs atfda_docs/label/2012/021519s003lbl.pdf; U.S. FOOD AND DRUG ADMIN., PAXIL (PAROXETINE HYDROCHLORIDE) LABEL (2012), available at http://www. accessdata.fda.gov/drugsatfda docs/label/2012/020031s067,020710s031.pdf; U.S. FOOD AND DRUG ADMIN., ZOLOFT (SERTRALINE HYDROCHLORIDE) LABEL (2013), available at http://www.accessdata.fda.gov/drugsatfda_docs/label/2013/ 019839s079,020990s038lbl.pdf; U.S. FOOD AND DRUG ADMIN., PRISTIQ (DESVENLAFAXINE) LABEL (2013), available at http://www.accessdata.fda.gov/ drugsatfda_docs/label/2013/021992s033s036lbl.pdf; U.S. FOOD AND DRUG ADMIN., CYMBALTA (DULOXETINE HYDROCHLORIDE) LABEL (2012), available at http://www.accessdata.fda.gov/drugsatfda_docs/label/2012/021427s040s041lbl. pdf; U.S. FOOD AND DRUG ADMIN., FETZIMA PRESCRIBING INFORMATION, supra note 61; U.S. FOOD AND DRUG ADMIN., EFFEXOR (VENLAFAXINE HYDROCHLORIDE) LABEL (2012), available at http://www.accessdata.fda.gov/ $drugs atf da_docs/label/2012/020151s 031s 055s 058s 060 lbl.pdf$ EFFEXOR LABEL]. See also Moore, supra note 25 (finding that violence as a side effect of drugs has not been highly studied, and that eleven antidepressants presented themselves as having highly disproportionately reported cases of violence associated with their use); Peter R. Breggin, Suicidality, Violence and Mania Caused by Selective Serotonin Reuptake Inhibitors (SSRIs): A Review and Analysis, 16 INT'L J. RISK & SAFETY MED. 31 (2003/2004) (finding that SSRIs are the common cause of "abnormal mental and behavioral conditions," spanning a spectrum from "mild agitation to manic psychoses, agitated depression, obsessive preoccupations that are alien or uncharacteristic of the individual, and akathisia"). See generally Maia Szalavitz, Top Ten Legal Drugs Linked Violence, TIME (Jan. to7 http://healthland.time.com/2011/01/07/top-ten-legal-drugs-linked-to-violence/ (reporting that of the top ten drugs associated with violence, five were antidepressants).

^{75.} EFFEXOR LABEL, *supra* note 75. A "rare event" is classified as those events that occur in less than one in 1000 patients. *Id*.

^{76.} Effexor: Label and Approval History, U.S. FOOD AND DRUG ADMIN., http://www.accessdata.fda.gov/scripts/cder/drugsatfda/index.cfm?fuseaction=S

required to put the mandatory suicide black box label warning in its prescribing information and medicine guide.⁷⁷ However, unlike any other antidepressant, Effexor lists "homicidal ideation."⁷⁸

Homicidal ideation occurs when a person begins to have thoughts of killing others and they imagine that homicide. Just as suicidal ideation can occur and eventually lead to actual suicide, so, too, can homicidal ideation occur and eventually lead to the death of others. MediGuard.org and RxISK.org are prescription drugreporting websites where patients can disclose any side effect(s) that they have experienced. 79 RxISK.org received one hundred and thirty-three reports of homicidal ideation from taking venlafaxine and forty-seven reports of venlafaxine as the suspected drug associated with the homicide. 81 Although not highly conclusive by any means, these reporting statistics show that homicide is occurring when people take Effexor, and the drug, as the source of causation for the heinous act, should not be disregarded.

C. Courts' Responses to Defenses Attempted by Drugged Defendants

Criminal defendants have many affirmative defenses available to them. The facts of each case dictate which defenses are appropriate. 82 Some defendants charged with homicide have argued under a variety of affirmative defenses that antidepressant side effects played a role in their conduct. Defendants have raised defenses from insanity to impaired condition and even the infamous

earch.Label_ApprovalHistory#apphist (last updated Mar. 27, 2015).

^{77.} Effexor Label, supra note 74.

^{78.} Id.

^{79.} MEDIGUARD, *supra* note 16; About Us, RXISK, http://wp.rxisk.org/about/(last visited Mar. 21, 2015).

^{80.} Sixty-eight of the one hundred and thirty-three reports of homicidal ideation were reported in the United States, with an additional thirty-eight reports that did not specify the country in which the patient resided. Effexor (Venalafaxine): Reported Side Effects – By Location: Homicidal Ideation (133 reported), RXISK, https://www.rxisk.org/Research/DrugInformation.aspx?Drug ID=3181&ProductDrugID=594&ProductName=Effexor#11_10049666_0_0_1_---_ (last visited Mar. 21, 2015).

^{81.} Fifteen of the forty-seven reports were from the United States. *Effexor (Venalafaxine): Reported Side Effects – By Location: Homicide (47 reported)*, RXISK, https://www.rxisk.org/Research/DrugInformation.aspx?DrugID=3181& ProductDrugID=594&ProductName=Effexor#11_10020364_0_0_1_--__ (last visited Mar. 21, 2015). *See generally List of Some of the Cases of Homicides and Attempted Homicides that have Occurred on SSRI, SNRI & Other Antidepressants, ADHD Stimulants*, WHALE (Apr. 19, 2007), http://www.whale.to/a/homicidesSSRISandADHDmedications.pdf (listing a myriad of different stories and criminal cases resulting from the association of antidepressants and homicide, both attempted and successfully completed).

^{82.} See generally Paul H. Robinson, Criminal Law Defenses: A Systematic Analysis, 82 COLUM. L. REV. 199 (1982) (analyzing criminal law defenses conceptually, and as the various defenses work as part of a larger system).

"Zoloft Defense"83 and "Prozac Defense."84 These arguments have resulted in little success. But it remains unclear where courts stand on the issue of antidepressants and the legal implications of their heinous side effects. This is especially true when antidepressant side effects are proffered as evidence during murder trials in support of an affirmative defense or a sentence-mitigating factor.

III. Analysis

This Part lays out the foundations of homicide and murder within the American criminal law system. Then two plausible affirmative defenses, involuntary intoxication and automatism, are defined and analyzed. These two defenses are compared to determine which will provide the best outcome at trial for a criminal defendant whose adverse reaction to Effexor resulted in murder.

A. Homicide – A Basic Overview

In the United States criminal law system, most offenses have both an *actus reus* element (the act) and a *mens rea* element (the mental state). ⁸⁵ In order to find someone culpable, both of these elements must be present. ⁸⁶ When analyzing potential defenses for homicide and murder while taking an antidepressant, the *mens rea element* is critical to focus on and center the defense around. Most likely the *actus reus* is not disputed as the defendant did perform an action that resulted in the death of someone. Because finding culpability for defendants who had an adverse reaction to their

^{83.} See State v. Pittman, 647 S.E.2d 144, 167, 170–71 (S.C. 2007) (holding "the defense's argument that the ingestion of Zoloft qualifies as a lawful act in the context of an involuntary manslaughter charge to be unconvincing," and holding that the trial court properly instructed the jury in applying the M'Naughten test for the involuntary intoxication defense). In the jury trial of Christopher Pittman, the defense presented a manual that Pfizer gives to prosecutors when Zoloft is under fire in litigation, just as in cases like Pittman's, to ultimately snuff out the entire defense. Rob Waters, Prosecuting for Pharma: Antidepressant Manufacturers Team up with District Attorneys to Make Sure the Zoloft Defense Doesn't Fly, MOTHER JONES (Nov./Dec. 2004) http://www.motherjones.com/politics/2004/11/prosecuting-pharma. See PFIZER'S ZOLOFT LITIGATION MANUAL (Feb. 7, 2005), available at http://health wyze.org/archive/zoloft_defense_manual.pdf (providing an easily accessible copy of Pfizer's Zoloft Litigation Manual used as an exhibit by the defense in Christopher Pittman's murder trial).

^{84.} See Harris, supra note 15, at 378–81 (finding the viability of using Prozac as an excuse for criminal conduct by way of a legal affirmative defense to be lacking any success in court precedent); Catherine M. Vale, Notes and Comments, The Rise and Fall of Prozac: Products Liability Cases and "The Prozac Defense" in Criminal Litigation, 12 St. Louis U. Pub. L. Rev. 525, 544–47 (1993) (discussing the rise of the "Prozac Defense" in criminal litigation and noting that juries have not been easily persuaded by its use).

^{85.} Id.

antidepressant, namely Effexor, will rely upon a determination of the defendant's mental state, affirmative defenses that negate or prove that the defendant lacked a conscious mental state at the time will provide better success.

Any person in modern American society with access to basic cable, a news source, or a social media platform has heard the terms "homicide," "87" "murder," 88" and "manslaughter." "89" Understanding these terms and their legal implications is important to this Comment's analysis and proposal. "Homicide" is the taking of a person's life by another when there is no justification for doing so. "Manslaughter" 22" covers both voluntarily or involuntarily homicides where the actor often can justify or explain the taking of that life, such as when a person acts out in the "heat of the moment" or when someone is mentally insane. "Manslaughter lacks the malice aforethought found in murder charges. "Murder" involves a malicious mental state where the actor intends to take another's life either by knowing their actions will lead to a person's death or

^{87.} JOSHUA DRESSLER, UNDERSTANDING CRIMINAL LAW 498 (5th ed. 2009).

^{88.} The common law has long recognized murder as "the killing of a human being by another human being with malice aforethought." *Id.* The key to distinguishing murder from other killings, like suicide, once included in the early common law form of homicide, and manslaughter, was the notion of malice. United States v. Wharton, 433 F.2d 451, 454 (D.C. Cir. 1970); DRESSLER, *supra* note 87, at 495, 498. Malice has long been recognized as a person's total disregard for human life and its value, as it manifests in the person's mental state resulting in death. *Id.* at 499; *Wharton*, 433 F. 2d at 456.

^{89.} Manslaughter exists in a middle ground between the malice needed to define murder and those killings done with justification or excuse, as it still constitutes an unlawful killing. DRESSLER, *supra* note 87, at 499 n.33. Generally, manslaughter is then broken down into two types. The first type, voluntary manslaughter, is committed when a killing is intentional but arises out of the "sudden heat of passion" most commonly by provocation. *Id.* at 500. The second, involuntary manslaughter, occurs when a lawful act is done in an unlawful manner and results from criminal negligence, or when the commission of an unlawful act, that is not a felony, results in the loss of life (like a lesser version of felony murder). *Id.*

^{90.} Stephen J. Morse, Criminal Law: Undiminished Confusion in Diminished Capacity, 75 J. CRIM. L. & CRIMINOLOGY 1, 6 (1984).

^{91.} DRESSLER, *supra* note 87, at 498. *See, e.g.*, MODEL PENAL CODE § 210.1 (West 2014) (defining [criminal] homicide as "murder, manslaughter, or negligent homicide" to include all situations in which a person "purposely, knowingly, recklessly, or negligently causes the death of another human being.").

^{92.} The Model Penal Code defines manslaughter as actions that cause death to another when "committed recklessly." MODEL PENAL CODE § 210.3(1)(a).

^{93.} DRESSLER, *supra* note 87, at 495, 498, 499–500. For example, the Model Penal Code provides that "a homicide which would otherwise be murder [that] is committed under the influence of extreme mental or emotional disturbance for which there is reasonable explanation or excuse" is considered manslaughter. MODEL PENAL CODE § 210.3(1)(b). "The reasonableness of such explanation or excuse shall be determined from the viewpoint of a person in the actor's situation under the circumstances as he believes them to be." *Id*.

purposefully taking that person's life. 94

To establish that a defendant committed murder, the prosecution must prove, beyond a reasonable doubt, that the defendant had a specific intent to kill. 95 Trying to prove intent, which is inherently subjective, places a substantial demand on the prosecution. 96 Thus, the law 97 permits prosecutors to satisfy this burden by demonstrating that the defendant only intended to inflict "grievous bodily injury" but actually caused death. 98 If the prosecution cannot prove one of those elements, the defendant is "not blameworthy" for that crime and to punish him would truly be "unjust as well as unconstitutional." 99 Criminal defendants who murder someone while taking antidepressants is the focus of this Comment and will be used to analyze two possible affirmative defenses. 100

94. The Model Penal Code defines murder as causing the death of another "purposely or knowingly; or . . . under circumstances manifesting extreme indifference to the value of human life." Id. § 210.2(1). Many states break down the criminal offense of "murder" into "degrees." See, e.g., COLO. REV. STAT. § 18-3-101 et seq. (1995) (classifying Colorado murders into two degrees); 720 ILL. COMP. STAT. 5/9-1 et seq. (2011) (classifying Illinois murders into two degrees); CAL. PENAL CODE § 187 et seq. (classifying California murders into two degrees). These classifications seek to apply statutorily mandated sentence ranges and to punish the higher classification, first degree murder, in a harsher fashion than the lower, such as second degree murder and even third degree in other states. See, e.g., COLO. REV. STAT. § 18-1.3-401 (West 2015) (mandating a presumptive sentence of life imprisonment or death for first degree murders and only eight to twelve years for second degree murder); CAL. PENAL CODE § 190 (2000) (mandating an additional 10 year sentencing enhancement for first degree murder); 720 ILL. COMP. STAT. 5/9-1 (mandating a death sentence for first degree murders). DRESSLER, supra note 87, at 501. This is known as the Pennsylvania Model of murder, as was created in the reformation of criminal laws in the late eighteenth century. Id. at 500. States that do not follow this model most likely frame their statutes around the Model Penal Code, which does not use "degrees" or the malice aforethought, as it is subsumed by the extreme recklessness of the actor. Id. at 537.

95. DRESSLER, supra note 87, at 503.

96. A syllogism is used to break down the mental state of the defendant in order to show the burden is met when the prosecution establishes "(1) ordinary people intend the natural and probable (or "foreseeable") consequences of their actions; (2) the defendant is an ordinary person; and (3) therefore, she intended the natural and probable consequences of her actions." *Id.* at 502.

97. As a clarifying note, this Comment uses the Modern Penal Code as the basis for much of its analysis. Statutes will vary state to state, so the analysis given here is in very general terms.

98. DRESSLER, *supra* note 87, at 507. In Illinois for example, a defendant may be found guilty of murder without having a specific intent to kill if the defendant acts in way that "create[s] a strong probability of death or great bodily harm to that individual or another" or causes a death while "attempting or committing a forcible felony other than second degree murder." 720 ILL. COMP. STAT. 5 § 5/9-1(a)(2)–(3).

99. Morse, supra note 90, at 6.

100. The focus on murder for this Comment is because the crime requires a specific intent. A person commits murder when they have a knowing recklessness and disregard for another's life, or they know that their actions

B. Involuntary Intoxication Defense: Served Neat or on the Rocks?

When homicide results from the use of popular drugs and their adverse effects, 101 involuntary intoxication warrants discussion as a potential defense. 102 To be considered "intoxicated," a person must have ingested a substance that causes a "disturbance of [their] mental or physical capacities."103 An involuntary intoxication narrows the definition even further. 104 Courts limit this defense to instances where a person: (1) is coerced into taking the substance; (2) ingests the substance by an innocent mistake; (3) is prescribed a medication and becomes unexpectedly intoxicated; or (4) suffers a "pathological intoxication." 105 Proving any one of these four instances of intoxication is difficult and highly burdensome on the defendant, which ultimately leads to the involuntary intoxication defense rarely finding success. When a defendant presents this defense, she acknowledges committing the illegal act. 106 At the same time, though, the defendant argues she lacked the required mental state. 107 This is because she was intoxicated and thus could not form the specific intent needed to commit murder. 108

will result in death. DRESSLER, *supra* note 87, at 510. In contrast, someone who should be aware that his or her actions could result in death, but ultimately the person lacks the intentional malice element, commits manslaughter. *Id.* Additionally, murder will be analyzed as a general concept without breaking down the concept into the different degrees of murder; i.e., first or second.

- 101. See SSRI Stories, supra note 24; RXISK, supra note 21.
- 102. Dressler, supra note 87, at 328.

103. People v. Low, 732 P.2d 622, 627 (Colo. 1987). This statutory definition in Colorado is based upon the Model Penal Code's definition. MODEL PENAL CODE § 2.08(5)(a). The law generally does not distinguish between alcohol, drugs, or other substances that can intoxicate a person. DRESSLER, *supra* note 87, at 317.

104. DRESSLER, supra note 87, at 328.

105. *Id.* at 328–29. *See* City of Minneapolis v. Altimus, 238 N.W.2d 851, 855 (Minn. 1976) (quoting the Model Penal Code section 2.08(5)(c) in its application of the involuntary intoxication defense). A "pathological intoxication" occurs where a person is susceptible to an exaggerated reaction from the substance taken and they are unaware of this substantial effect, and generally this occurs as a result of a pre-existing mental or physical condition. DRESSLER, *supra* note 87, at 329. Most often this occurs when a person drinks the smallest bit of alcohol but responds in a very aggressive and violent way. *See generally* Tim Feulner, Note, *The Minotaur Defense: The Myth of the Pathological Intoxication Defense*, 49 AM. CRIM. L. REV. 1969 (2012) (demonstrating the use of a pathological intoxication defense, as well as its natural incorporation into other involuntary act defenses).

106. DRESSLER, supra note 87, at 328. This satisfies the $actus\ reus$ element. Id.

107. Id. This does not satisfy the mens rea element. Id.

108. *Id.* It is also important to note that under the Model Penal Code, there is no distinction between "general" and "specific" intent crimes, and the defense just goes towards whether the person had the required mental state for the offense. MODEL PENAL CODE § 2.08(1).

Since 1915, the federal courts have faced claims of involuntary intoxication from defendants who took prescription drugs and the courts have harshly criticized the defense. ¹⁰⁹ In *Perkins v. United States*, the Fourth Circuit found there is no onus on a patient to "know that a physician's prescription may produce a dangerous frenzy." ¹¹⁰ The court reasoned that if such a frenzied effect occurred by taking the medicine as instructed by his physician, but then he "was thrown into a mental state which placed him beyond his own control . . . he would not be legally responsible." ¹¹¹ For the first time, the court created and recognized the third instance of involuntary intoxication listed above, where a person is prescribed a medication and then unexpectedly becomes intoxicated because of that drug.

In 1976, the Minnesota Supreme Court gave involuntary intoxication even stronger footing in *Minneapolis v. Altimus*. ¹¹² The *Altimus* Court created a more readily understandable set of elements to determine whether a defendant should be criminally culpable for her actions. ¹¹³ First, the defendant "must not know, or have reason to know, that the prescribed drug is likely to have an intoxicating effect." ¹¹⁴ Second, the prescribed drug must have caused her to be intoxicated during the alleged criminal act. ¹¹⁵ Third, that involuntary intoxication must have rendered her temporarily insane. ¹¹⁶ This analysis strengthens courts' recognition

^{109.} DRESSLER, *supra* note 87, at 328; Perkins v. United States, 228 F. 408 (4th Cir. 1915). *See also* Mitchell Keiter, *Just Say No Excuse: The Rise and Fall of the Intoxication Defense*, 87 J. CRIM. L. & CRIMINOLOGY 482, 482–83; 484–92 (1997) (offering an overview of why courts and society have had differing and changing opinions on intoxicated defendants over the decades).

^{110.} Id. at 415.

^{111.} Id. at 416.

^{112.} Altimus, 238 N.W.2d at 856–57. In this case, the defendant was arguing that because he took Valium, as prescribed by his physician for a back problem and the flu only three days prior, "he was unexpectedly intoxicated to the point of unconsciousness, incapable of controlling his actions" when he crashed into another vehicle and fled the accident scene, and he should not be held criminally responsible. Id. at 853–54, 857.

^{113.} Id. at 857.

^{114.} *Id*. If the defendant was warned of such extreme side effects, or it could be demonstrated that he read the prescription or should have known of the effects, then the inquiry into whether the involuntary intoxication defense satisfied the elements would fail. *Id*.

^{115.} Id.

^{116.} *Id.* Here is another area of great contention amongst courts when determining if involuntary intoxication ought to be distinct from an insanity defense, or perhaps that it is one in the same family of defenses. *See generally* Feulner, *supra* note 105, at 1983–86 (arguing involuntary intoxication as a *mens rea* defense, which would mean it is not an affirmative defense but another form of evidence that shows the prosecution failed to meet their burden on the *mens rea* element, like with insanity); Deborah W. Denno, *Crime and Consciousness: Science and Involuntary Acts*, 87 MINN. L. REV. 269, 337–345 (2002) (comparing an involuntary unconsciousness defense to an insanity defense in its application and in the viewpoint of courts); Robinson, *supra* note 82, at 221–29 (setting forth a five-tiered framework from which courts can conceptualize the different types

of involuntary intoxication as a complete defense by outlining the elements needed to prove the defense in a way that defendants can attempt to present it successfully. This framework for involuntary intoxication elements can be applied to any jurisdiction where involuntary intoxication is allowed as an affirmative defense, as most jurisdictions will require the defendant to show that they had no reason to know or believe that the prescribed drug would have such an adverse effect and that the adverse effect is what led to the murder.

The United States Supreme Court has not offered an opinion on whether involuntary intoxication is a viable defense. 118 However, in a dissent to a decision regarding voluntary intoxication in *Montana v. Egelhoff*, Justice Sandra Day O'Connor, joined by Justices John Stevens, David Souter and Stephen Breyer, discuss how Montana's statute carving out an exception to involuntary intoxication evidence. 119 The dissenting Justices assert that state legislatures cannot preclude a defendant from presenting evidence of involuntary intoxication to rebut the prosecution's case because such evidence goes to the heart of the mental state of the defendant and is thus relevant. 120 The Court acknowledged that the state has a significant interest in protecting the public by ensuring through its criminal laws that a defendant is not acquitted of heinous acts because she voluntarily become intoxicated. 121 As the dissents of

of defenses and allowing the defenses to be more properly and consistently applied in the criminal law context). The Minnesota Supreme Court held that "if the defendant is mentally deficient due to involuntary intoxication, then he may be excused from criminal responsibility" only if that finding of temporary insanity satisfied its statute per the third element outlined in the case. *Altimus*, 238 N.W.2d at 857.

117. Legislatures will go even further to codify the defense as a complete defense, acquitting culpability entirely, and the Supreme Court has not ruled against such statutes. See Hendershott v. People, 653 P.2d 385, 396 n.10 (Colo. 1982), cert. denied, 459 U.S. 1225 (1983). See also Keiter, supra note 109, at 518–20 (providing an appendix of states and how they apply intoxication defenses towards various crimes, as of 1997, for a general idea of where the states stand).

118. However, the Supreme Court has granted petitions for writ of certiorari and decided three cases dealing with voluntary intoxication. *See generally* Montana v. Egelhoff, 518 U.S. 37 (1996) (holding that a jury instruction telling the jurors to disregard the intoxicated state of the defendant was not a violation of defendant's Due Process rights); Tucker v. United States, 151 U.S. 164 (1894) (finding that voluntary intoxication does not in any way excuse crimes committed while effected); Hopt v. People, 104 U.S. 631 (1881) (holding that evidence of defendant's intoxication at the time of the murder was admissible).

119. Montana v. Egelhoff, 518 U.S. 37, 67 (1996) (O'Connor, J., dissenting).

120. Here, the Supreme Court decided that in this particular case where a man shot two people while voluntarily intoxicated, states may create statutes that limit the introduction of such evidence, as criminal law is left for the states to dictate. *Id.* at 56. *See also* Keiter, *supra* note 109, at 500–05 (explaining the holding of *Egelhoff* and the implications that it created for defendants arguing an intoxication defense).

121. Id. at 56.

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both *Montana v. Egelhoff* and *Begay v. United States* note, many states *do* recognize involuntary intoxication as a defense. 122

Involuntary intoxication is an easy vehicle for those defendants arguing the infamous "Prozac defense" and its other well-known antidepressant counterparts. 123 The viability of this defense has yet to be persuasive in criminal trials. 124 Employing the elements as laid out in *Altimus*, a defendant today would have a particularly hard time proving the last element. 125 The third element requires the prescription drug have an unknown effect that renders the defendant temporarily insane at the time of the act's commission. 126

In State v. Gardner, a defendant almost successfully utilized the involuntary intoxication defense in a murder case involving consumption of a prescription drug. 127 During pre-trial preparation, the defendant told the prosecution he would raise the involuntary intoxication defense because he consumed Prozac. 128 This revelation prompted the prosecution to file a pre-trial motion to determine which legal standard would be used for this defense. 129 Utah did not have a statute specifically for involuntary intoxication. 130 Therefore, the trial court held the defendant would have to argue under a mental illness defense. 131 Under this defense, the defendant would have to show that he was mentally ill at the time of the murder, and due to that mental illness, he did not have the requisite mental state to have committed murder. If that defense could be met, he would be found not guilty. 132 Ultimately, the Utah Supreme Court affirmed, holding that involuntary intoxication should not be considered any differently than a defense of mental illness. 133

^{122.} *Id.* at 67; Begay v. United States, 553 U.S. 137 (2008). In *Begay*, the dissenting opinion by Justice Samuel Alito, and joined by Justices David Souter and Clarence Thomas, noted the troublesome nature of statutes that have judicially added requirements, such as "purposeful" in Georgia, that would require a defendant to prove they intended to drive in driving under the influence or while intoxicated cases. *Id.* at 159 (Alito, J., dissenting).

^{123.} Harris, *supra* note 15, at 378–81; Vale, *supra* note 84, at 544–47.

^{124.} Meghan P. Ingle, Note, Law on the Rocks: The Intoxication Defenses are Being Eighty-Sixed, 55 VAND. L. REV. 607 (2002). See Harris, supra note 15, at 380 (finding that up until the comment's publication in 1999, no "Prozac patient [had] met the legal definition of insanity.").

^{125. &}quot;The third requirement is that the defendant, due to involuntary intoxication, is temporarily insane." *Altimus*, 238 N.W.2d at 857.

^{126.} Harris, *supra* note 15, at 380.

^{127.} State v. Gardner, 870 P.2d 900 (Utah 1993).

^{128.} Id. at 900.

^{129.} Id. at 900-01.

^{130.} Id.

^{131.} Id. at 900-02.

^{132.} Id.

^{133.} *Id.* at 902. This has remained the standard followed by other states with similar statutory provisions, as seen in the line of cases that cited to the *Gardner* decision in Utah. *See* State v. McKeon, 38 P.3d 1236 (Ariz. App. 2002) (analyzing the prescription medicine involuntary intoxication defense for when a defendant takes a drug that is psychoactive and whether or not it is then

Involuntary intoxication seems like a logical defense for a defendant who suffered an adverse reaction to a prescribed antidepressant. As the defendant knew they were ingesting a drug that is meant to have a positive effect, the adverse reaction of murder would not be foreseeable to them. There is a high probability that patients who are prescribed the drug Effexor, specifically, are not warned that homicidal ideation might occur. However, the current view of the courts indicates the chances of successfully asserting the involuntary intoxication defense are very low.

C. Automatism Defense: Domō Arigatō, Your Honor 134

Luckily, another defense offers potential success for a defendant accused of committing murder while on a prescription antidepressant. The second defense is the automatism defense. The A person is in a state of automatism when they are able to perform actions but are unconscious of their conduct, or acting without the requisite will. The As early as 1879, state courts recognized that a defendant should not be punished for actions done in an unconscious state. The Especially where a defendant does not have prior knowledge that such an unconscious state will or can occur. California is one state that recognizes automatism as a complete defense, even for criminal homicide. The California Appellate Court in *People v. Newton* reasoned that when a person is involuntarily unconscious, The Island State of the Association of the Island State of the Association of the Island State o

abused through a statutory lens); Brancaccio v. State, 698 So. 2d 597 (Fla. App. 1997) (recognizing that involuntary intoxication instructions should be given at the trial court level and not just recognized on appeal).

134. Domō Arigatō means "thank you" in Japanese. *Arigatō*, DICTIONARY.COM, http://dictionary.reference.com/browse/arigato (last visited Mar. 27, 2015).

135. Both the involuntary intoxication and automatism defenses deal with negating the requisite mental state needed in order to be convicted of murder. DRESSLER, supra note 87, at 328–31; Emily Grant, Note, While You were Sleeping or Addicted: A Suggested Expansion of the Automatism Doctrine to Include an Addiction Defense, 2000 U. ILL. L. REV. 997, 1003 (2000). See State v. Rogers, 725 S.E.2d 342, 349 (N.C. Ct. App. 2011) (holding in North Carolina that automatism is an affirmative defense that negates both the mental state and voluntary act elements to a criminal charge).

136. 2 PAUL H. ROBINSON, CRIM. L. DEF. § 172 (2013).

137. People v. Grant, 360 N.E.2d 809, 814 (Ill. App. Ct. 1977); Fulcher v. State, 633 P.2d 142, 145 (Wyo. 1981); BLACK'S LAW DICTIONARY 154 (9th ed. 2009).

138. See Fain v. Commonwealth, 78 Ky. 183 (Ky. App. Ct. 1879) (finding that where the prisoner was awoken from sleep, and then shot and killed the person who awoke him, he could not be held legally culpable for being unconscious during the act because of his lack of knowledge for this propensity of violence at such a moment).

139. Id.

140. People v. Newton, 8 Cal. App. 3d 359, 376 (Cal. App. 1970).

141. They are involuntarily unconscious not because of an act they have

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physical ways that people often expect, like being in a coma. 142

The Montana Supreme Court recently addressed the automatism defense for the first time in *City of Missoula v. Paffhausen*. ¹⁴³ The defendant was a young woman charged with driving under the influence. ¹⁴⁴ She argued that because she was slipped a date rape drug, she was unable to knowingly and voluntarily commit the act of driving while under the influence. ¹⁴⁵ The Montana Supreme Court held that allowing the defendant to argue the automatism defense was statutorily allowed, and the "absolute liability" element of a DUI is not, in fact, wholly absolute. ¹⁴⁶ The court further outlined that it is up to the defendant to prove through admissible evidence of her state of automatism at the time, and that the burden to prove each and every element, beyond a reasonable doubt, still included that of the defendant's voluntary act. ¹⁴⁷

The automatism defense differs from other mental illnesses or insanity defenses because automatism does not require a prior mental disease or defect. Automatism only requires the person acted without any volition. Asserting the automatism defense means the prosecution cannot prove the actus reus, because the defendant was not acting voluntarily. Defendants can have a difficult time proving that what put them in a state of automatism was not voluntary. This presents a sizable hurdle for defendants

done or a voluntary intoxication. Id.

142. Id.

143. City of Missoula v. Paffhausen, 289 P.3d 141 (Mont. 2012).

144. Id. at 144.

145. The defendant argues this particular crime from the *actus reus* standpoint because DUI is an absolute liability offense and her mental state would not be addressed per the Montana statutes. *Id.* at 145.

146. Id. at 147.

147. *Id.* at 148. The DUI offense is to be distinguished from homicide because a finding for murder requires the mental state be proven, whereas DUI does not. *Id.* at 145; DRESSLER, *supra* note 87, at 537.

148. Grant, *supra* note 135, at 1000–04.

149. *Id.* Also important to note is the difference in treatment between a defendant who is found legally insane and a defendant who successfully argues an automatism defense. *Id.* at 1004–05. If a defendant is found insane, they will be sentenced to a mental institution, whereas someone who suffers from a state of automatism, like the akathisia associated with taking prescription drugs, there is no long-term cure needed to assist the defendant. *Id.*; *Akathisia, Medical*, Merriam-Webster Dictionary http://www.merriam-webster.com/medical/akathisia (last visited Mar. 27, 2015). "Akathisia" is a "condition characterized by uncontrollable motor restlessness." *Id.*

150. Feulner, *supra* note 105, at 1986–87. *See generally* ROBINSON, *supra* note 131, at § 171 (discussing the objective and subjective duality of the "voluntary act" requirement of culpability in nearly all offenses).

151. See generally Eunice A. Eichelberger, Annotation, Automatism or Unconsciousness as Defense to Criminal Charge, 27 A.L.R.4th 607 (2013) (listing a variety of cases throughout the United States where defendants have unsuccessfully argued an automatism defense because the drugs that affected them were taken voluntarily or with knowledge of the effects the drug would

taking an antidepressant and then committing murder. ¹⁵² The prosecution will contend that the defendant voluntarily took the antidepressant. Furthermore, the prosecution will insist that not knowing the side effects of the antidepressant should make the defendant accountable and culpable for the murder. Conversely, the defendant will argue they did not know the extreme effects and heinous adverse events that would result from taking the drug. ¹⁵³ Not every state will find the automatism defense to wholly excuse the defendant's actions but will allow for the argument of the unconscious state to be considered during sentencing as a mitigation factor.

Arguing the automatism defense gives the defendant an actual chance of success at trial. They will not have to prove any prior medical conditions, or that they temporarily became insane, a highly burdensome and difficult element to establish. Additionally, defendants asserting the automatism defense have modern science at their disposal to make the defense more compelling, as presented in my proposal. This defense will allow the defendant to acknowledge that they took the antidepressant, namely Effexor, and then became involuntarily unconscious due to an adverse side effect of the drug. During that state of unconsciousness the murder takes place and therefore the defendant was not in the conscious state to have willingly acted in such a heinous way. A defendant asserting the automatism defense will have a better opportunity to present a compelling defense that can help establish their innocence than with the impossible, uphill battle of involuntary intoxication.

IV. Proposal

The automatism defense allows defendants an opportunity to present a viable defense for homicide in instances of sleepwalking. ¹⁵⁴ Likewise, courts should also recognize this defense for instances where a defendant, while taking Effexor, commits

have on the defendant).

^{152.} Id

^{153.} The entire premise of this defense, for the purpose of this Comment, is that defendants did not know of the side effects that either allegedly or ultimately led to the homicide. As such, a best practice is not to just have the FDA put black box label warnings on the drugs, but to also put a duty upon doctors to make sure they are informing patients of all potential side effects, including homicidal ideation for those taking Effexor, as under the assumption that doctors are aware of all the side effects from the manufacturing companies. Grohol, *supra* note 67; Cohan, *supra* note 15, at 128.

^{154.} Grant, *supra* note 135, at 997.

murder.¹⁵⁵ Blood¹⁵⁶ or genetic testing¹⁵⁷ for mutations on the CYP450 gene¹⁵⁸ can prevent future homicides by identifying people who are predisposed to side effects from these drugs.¹⁵⁹ In those jurisdictions where automatism is not accepted by courts as a complete defense, the developments in science should be taken into consideration as a substantial mitigating factor in sentencing.

A. Who Should Be Able to Successfully Argue an Automatism Defense for Antidepressant-Induced Murder?

In 2003, public concern and push from the science and medical fields led the FDA to recognize that antidepressants caused heinous side effects. However, the *only* antidepressant given a black box warning for homicide and homicidal ideations in the United States was, and remains, Effexor. 161 As the sole antidepressant warning of

155. See generally Michele Tuminello et al., The Phenomenology of Specialization of Criminal Suspects, 8 PLoS ONE 1, 1 (2013), available at http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.00647 03 (explaining how research over the past couple of decades has shown theories emerging to demonstrate, and perhaps prove, that genetic and social factors can lead to violence, particularly in the relationship between the brain and that person's pre-existing propensity towards violence and delinquency).

156. See Kate Kelland, Study Finds Why Antidepressants Work Better for Some, REUTERS (Sep. 19, 2012), http://www.reuters.com/article/2012/09/19/us-depression-drugs-biomarkers-idUSBRE88I0RL20120919 (finding in a new, small study in England, that high levels of inflammation in biological markers can be identified in the blood to help "personalize the treatment of depression" and help remove the "trial and error" approach taken by most prescribing physicians when putting their patients on an antidepressant).

157. See generally Julie Steenhuysen, Getting Personal: New Tests Aid Drug Performance, REUTERS (July 30, 2009), http://www.reuters.com/article/2009/07/31/us-diagnostics-drugs-idUSTRE56T79P20090731 (explaining how the 2003 Human Genome Project lead to an exploration of biomarkers, such as proteins or genes, to identify which drugs will work best for certain people, depending upon their biological make-up, as the push from regulators like the Food and Drug Administration goes towards requiring more drug companies to use "companion diagnostic tests" before a patient participates in a clinical trial or uses the drug).

158. See generally Yolande Lucire & Christopher Crotty, Antidepressant-Induced Akathisia-Related Homicides Associated with Diminishing Mutations in Metabolizing Genes of the CYP450 Family, 4 PHARMACOGENOMICS & PERSONALIZED MED. 65 (2011) http://www.dovepress.com/antidepressant-induced-akathisia-related-homicides-associated-with-dim-peer-reviewed-article-PGPM (finding that many of the drugs used to chemically alter the brain, like SSRIs and SNRIs do with seratonin, interact with the cytochrome 450 (CYP450) "superfamily of genes," which is a genetically determined system of enzymes that are crucial to metabolizing antidepressants and many other drugs commonly prescribed).

159. Effexor Label, supra note 74.

160. FDA Proposes New Warnings, supra note 67; Grohol, supra note 67.

161. Effexor Label, supra note 73.

homicidal ideation, the automatism defense should be available to those defendants that are prescribed and taking Effexor at the time of the murder. When a person takes Effexor, they are not rendered mentally insane, nor are they involuntarily intoxicated. They are put into a state of unconsciousness because their body is not properly digesting the drug. This affects them in a seriously adverse way that is warned about on the black box label for Effexor. Yet no precautions are taken to make sure a person is not predisposed to suffer that rare, yet occurring, adverse event of homicidal ideation.

Even more so, this defense should be available for Effexor users who have no history of mental illness or violence. A criminal defendant, who shows that they were prescribed Effexor, and they were taking the antidepressant at the time of the murder, or recently stopped before the murder, 163 should be entitled to presenting this defense. In a jury trial, the automatism defense can help the defendant put forth a story that allows the jury to wrap their minds around how something so heinous could occur by someone that does not fit the murderer mold. So often juries want to hear from the defendant and understand why the defendant would do such a thing to someone else. The automatism defense not only allows an opportunity for the defendant to explain how or why they murdered that person, ultimately because of taking Effexor and having an adverse reaction to the drug, but also it allows the jury to satisfy their need to know and hear the defendant's side of the story.

B. What Can Prove the Drugs Induced the Murder?

There are existing biomarkers that tell physicians which drugs a person can or cannot properly digest in their bodies. 164 Science

^{162.} Important to note that often people are on a "cocktail" of drugs and not just the one antidepressant when the murder occurs. See Lucire, supra note 146, at 71–76 (detailing ten subjects who committed homicide while on an antidepressant and studied for this research article); SSRI Stories, supra note 24 (providing numerous stories of those affected by antidepressants in combination with other prescription drugs). As well, people are sometimes switched from one type of antidepressant to another when the adverse event happens, only a matter of days to weeks after the switch is made. Lucire, supra note 146; SSRI Stories, supra note 24.

^{163.} Adverse side effects are also experienced when people stop taking the antidepressant and their bodies can then go through withdrawal symptoms that lead to the adverse events on the warning labels. Cohan, supra note 15, at 128–30. See generally Rebecca White, Waking Up from Sadness: Many Find Trouble Getting off Antidepressants, AL JAZEERA AM. (Jan. 22, 2014), http://america.aljazeera.com/articles/2014/1/22/patients-mostly-womenfindtrou blegettingoffofantidepressants.html (reporting on the negative side effects antidepressant users can suffer when they stop taking the drug, of which women make up a substantial number of the affected).

^{164.} Kelland, supra note 156; Steenhuysen, supra note 157; Lucire, supra

proving that the criminal defendant suffered from an adverse reaction to the antidepressant exists. ¹⁶⁵ Cytochrome P450 (CYP450) is the family of genes responsible for creating the enzymes essential to digest and breakdown antidepressants. ¹⁶⁶ When there is a genetic mutation on any of the four alleles of this gene, that person's body is unable to produce the enzymes needed to digest the drug. ¹⁶⁷ This results in a toxic buildup of the antidepressant in the targeted area for the medication, the brain. ¹⁶⁸ For those taking antidepressants, this knowledge can be a matter of life or death.

A body's inability to break down the antidepressant properly causes a toxic buildup in the brain. 169 This buildup can lead to actions arising out of an unconscious mental state because the drugs are not properly digested and in return affect that person in an adverse way that does not result as intended to suppress the

note 158.

165. Lucire, supra note 158, at 68–71. See also K. Oved et al., Genome-wide Expression Profiling of Human Lymphoblastoid Cell Lines Implicates Intergrin Beta-3 in the Mode of Action of Antidepressants, 3 TRANSLATIONAL PSYCHIATRY 1 (2013) (studying human genome expressions to figure out why SSRIs do not have immediate effects on some patients, and if any genomic expressions have a link to any activity in the serotonin transporter).

166. Lucire, supra note 158. See generally PK Gillman, Tricyclic Antidepressant Pharmacology and Therapeutic Drug Interactions Updated, 151 BRIT. J. PHARMACOLOGY 737, 737–48 (2007), available at http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2014120/pdf/0707253a.pdf (finding as science advances, the importance of noting the interactions of enzymes and receptors to antidepressants and other drugs allows for a greater understanding of the effects the drugs can have on the human body). There exists an entire online database concerning the CYP450 allele nomenclature with useful links and charts to better understand how CYP450 interacts with drugs. The Human Cytochrome P450 (CYP) Allele Nomenclature Database, CYPALLELES, http://www.cypalleles.ki.se/index.htm (last visited Mar. 21, 2015).

167. Lucire, supra note 158.

168. Id.; Gillman, supra note 169; Breggin, supra note 74, at 35-36.

169. See Bhawana Arora & Nirupama Kannikeswaran, The Serotonin Syndrome-The Need for Physician's Awareness, 3 Int. J. EMERGENCY MED. 373, 374 (2010) (finding that serotonin syndrome is often in patients taking antidepressants and "occurs due to excess serotonin activity in the brain and periphery"); see also Peter Breggin, Intoxication Anosognosia: The Spellbinding Effect of Psychiatric Drugs, 8 ETHICAL HUMAN PSYCHOLOGY & PSYCHIATRY 201, 205-206, 209 (2006) (describing "medication spellbinding" as a drug-induced mental disability that prevents the victim, who is taking the drugs, from realizing that the drug is not helping them function and feel better, but rather is causing them to exhibit sometimes extreme behaviors, like violence towards others and themselves, citing antidepressants as having a very common occurrence of this "spellbinding"); see generally Ken Gillman, Serotonin Toxicity, PSYCHOTROPICAL Syndrome, RESEARCH, http://www.psychotropical.com/index.php/serotonin-toxicity (last updated Oct. 5, 2013) (describing serotonin toxicity as the side effects experienced after ingesting an antidepressant and resulting in the "increase in the level of serotonin synapses in the central nervous system[], which then excessively stimulate all types of post synaptic serotonin receptors").

feelings of depression.¹⁷⁰ As stated at the beginning of this Comment, if one out of every ten people over the age of twelve has an antidepressant prescription, then the odds of having people suffer from the inability to digest that drug, and not know that they are unable to, can be relatively high. From a legal perspective, these cases will undoubtedly become more numerous with the continual rise of antidepressant prescriptions and knowledge that drugs, like Effexor, have very severe and possible adverse reactions.¹⁷¹ Ultimately, courts should recognize that antidepressant prescription drugs can and do, in fact, play a part in homicide, particularly where the Effexor drug label warns that thoughts of homicide might occur.¹⁷²

C. How Can a Defendant Prove That the Drugs Induced Murder?

Two members of the psychiatric field offer an answer. Dr. David Healy is an internationally known and highly respected psychiatrist, psychopharmacologist, scientist and author, who testified in numerous cases in the United States and English courts. ¹⁷³ Similarly, Dr. Peter R. Breggin is a psychiatrist, medical expert, researcher, and author. ¹⁷⁴ Dr. Breggin testified in over eighty civil and criminal cases, including the first case to address the issue of antidepressants causing homicide in North America. ¹⁷⁵ This case from Canada held that antidepressants played a culpable role in the actions of a seventeen-year-old who murdered his friend. ¹⁷⁶ Both doctors have contributed many years of research and

^{170.} See generally David Healy et al., Antidepressants and Violence: Problems at the Interface of Medicine and Law, 3 PLOS MED. 1 (2006), available at http://www.davidhealy.org.php53-23.dfw1-1.websitetestlink.com/wpcontent/uploads/2012/05/2006-Healy-Herxheimer-Menkes-Violence-

Antidepressants 1.pdf (finding that there are viable instances in which the law will need to recognize that antidepressants played a part in the homicide, and will need to reconcile where and how to allow this information into the courts).

^{171.} NCHS, HEALTH, U.S. 2010, *supra* note 4, at 19; Pratt, *supra* note 6, at 1; Maggie Fox, *Antidepressant Use Doubles in U.S.*, *Study Finds*, REUTERS (Aug. 4, 2009), http://www.reuters.com/article/2009/08/04/us-antidepressants-usa-idUSTRE5725E720090804.

^{172.} Healy et al., *supra* note 170, at 1, 4–5.

^{173.} Dr. David Healy Bio, Dr. DAVID HEALY, http://davidhealy.org/davidhealy-bio/ (last visited Mar. 21, 2015).

^{174.} About Peter R. Breggin, M.D., BREGGIN.COM, http://breggin.com/index.php?option=com_content&task=view&id=1&Itemid=41 (last visited Mar. 21, 2015)

^{175.} Resume, Bibliography, and Legal Cases: Peter R. Breggin, M.D., BREGGIN.COM, http://breggin.com/resume.pdf (last visited Mar. 21, 2015) [hereinafter Resume].

^{176.} R. v. C.J.P., 2011 MBPC 62 (Can. Man. P.C. 2011) (finding that C.J.P., the defendant, did not deliberately plan the murder of his friend and that the explanation offered by Dr. Breggin on the effect Prozac had on the defendant was consistent with the evidence presented in the hearing, and holding that

writing on the effects of antidepressants and the culpability of defendants, as well in support of civil litigation against pharmaceutical companies. To support their automatism defense, a criminal defendant should contact these doctors, who have been previously certified as expert witnesses, from find other psychiatrists or pharmacologists with special knowledge of antidepressants and their effects.

The other component needed for a successful automatism defense is the scientific evidence produced through blood and genetic testing. ¹⁸⁰ A criminal defendant can demonstrate that they have biomarkers in their blood for higher levels of inflammation by testing a blood sample. ¹⁸¹ They can also test their DNA profile for genetic mutations on the specific alleles of the CYP450 gene that are key in the creation of the enzymes needed to properly breakdown and digest the antidepressant. ¹⁸² Although this testing is currently not convenient, especially from an economic standpoint, there are laboratories that will extract and process DNA to check for any mutations. ¹⁸³ Either of these tests can provide scientific evidence in support of an automatism defense, and hopefully aid in acquitting the defendant or serving as a mitigating factor in their sentencing.

Another practicable way to prove the drugs had an adverse effect on the defendant is through testimony from people who knew the defendant before and after taking the drug. Elucidating on different periods of time in the defendant's life can prove quite helpful. Testifying about the time before taking the prescribed antidepressant, during the ingestion of the drug, and leading up to the incident, can help to put the drug's effect on the defendant into perspective. Often times, those closest to the defendant are shocked

[&]quot;the Prozac affected his behavior and judgment, thereby reducing his moral culpability," therefore the defendant was sentenced as a juvenile and not an adult).

^{177.} Books, DR. DAVID HEALY, http://davidhealy.org/books/ (last visited Mar. 21, 2015); Articles, DR. DAVID HEALY, http://davidhealy.org/articles/ (last visited Mar. 21, 2015); Books, BREGGIN.COM, http://breggin.com/index.php? option=com_content&task=blogcategory&id=15&Itemid=42 (last visited Mar. 21, 2015); Scientific Papers, BREGGIN.COM, http://breggin.com/index.php?option=com_docman&Itemid=37 (last visited Mar. 21, 2015).

^{178.} Contact Dr. Healy through his website at http://davidhealy.org/contact-us/. Contact Dr. Breggin by consulting his phone and fax numbers, or email, listed on his website at http://breggin.com/index.php?option=com_content&task=view&id=111.

^{179.} Healy, supra note 173; Resume, supra note 175.

^{180.} Kelland, supra note 156; Steenhuysen, supra note 157; Lucire, supra note 158.

^{181.} Kelland, supra note 156; Steenhuysen, supra note 157.

^{182.} Lucire, *supra* note 158; Gillman, *supra* note 166.

^{183.} Services such as these, and their pricing, are available from laboratories like Independent Forensic Services. Information about IFS may be found at http://www.ifscolorado.com.

that she is facing murder charges. ¹⁸⁴ This can be because of the defendant's disposition and reputation before taking the drug as perceived by those people who know them well. Painting a picture of the defendant as they are as a person not only humanizes her but also makes her more relatable to a judge and jury who might then seek mercy on this person who was also a victim. This person was handed a prescription to help them feel better, but in reality they were left with a toxic, ticking time bomb in their body. She was unnecessarily a victim of Effexor and its adverse side effects.

D. When Courts Do Not Accept Automatism as a Complete Defense, What Shall a Defendant Do?

Undoubtedly, there will be state judicial systems that do not, and will not, accept the automatism defense. This does not mean that a criminal defendant in those jurisdictions is left without hope. Even where the automatism defense, and the evidence in support thereof, will not exonerate the defendant, defense attorneys must argue that the evidence be considered and substantially weighed in the favor of the defendant when sentencing. Through a proper presentation of the defense by providing the testimony of expert witnesses with experience in the health, psychiatry, and psychopharmacology fields, combined with testimony of the effect the drug had on the defendant as observed and experienced by others, the court should take into account the effect Effexor or any antidepressant has on the user. This is not to say that all defendants should present an automatism defense any time they are faced with murder charges, but where defendants have a legitimate explanation for why this murder occurred at their hands as an adverse event and side effect to taking Effexor, this defense and mitigating evidence should be considered and weighed. Only by allowing this evidence to be heard can defendants who suffered Effexor's side effects, and who do not have a history of violence or mental illness, have hope of a just outcome in their favor.

V. CONCLUSION

When the courts are faced with trials for criminal defendants who murdered someone while taking Effexor, they should allow the automatism defense in support of the defendant's inability to have intended the death. The involuntary intoxication defense has been on the "out" for a while now, and will not offer any success for a criminal defendant in the United States. The better alternative is the automatism defense. This defense allows the defendant to argue that the drugs put them into such a state of unconsciousness that

they could not reasonably have intended or acted of their own volition at the time of the incident.

The pharmaceutical industry will continue to grow, especially in light of the existing trend of writing Americans prescriptions for antidepressants as part of a drug "cocktail." With this growth comes a great danger to the health of those seeking help from their physicians, and potentially everyone who is in their lives. Courts need to acknowledge that the side effects listed on the labels are dire and very real. Additionally, courts should acknowledge that taking antidepressants for some people leads to grave and unjust consequences when their trusted physicians hand them ticking time bombs. Therefore, courts need to change their understanding and perception of criminal law as science continues to advance in order to help "increase" the courts' understanding of human conduct and relationships." 185

^{185.} Gorham v. United States, 339 A.2d 401, 432 (D.C. 1975) (Fickling, J., dissenting).