

Barbiturates

Introduction

Barbiturates are drugs that affect the central nervous system. It was developed by Adolf von Baeyer in 1864 and is used for neurological and psychological treatment. Barbiturates help in treating anxiety and seizure disorders, insomnia, pre-operative sedation, and daytime sedation. In some cases veterinarians use it as a form of euthanasia. There are many types of barbiturates; short-acting and long-term acting, along with different schedules of the drug. Physicians and psychologist, to help regulate the dosage and effect of the drug on the patient use the schedules. Barbiturates are very addictive and have a high street value. They can be fatal, if taken in too high a dose.

I chose barbiturates for my web critique topic because it was a drug that I had heard of, through various people and situations, but never really knew what it was. Learning about this drug and its effect on people and various cultures has proven very informative and interesting to me.

Section 1: Background and Problem Statement

- **Web site #1:** “The Vaults of Erowid”
- **(Score: 26)**
- **Web address:** <http://www.erowid.org/chemicals/barbiturates/>
- **Information:**
 - The information from “The Vault of Erowid” was very informative on the subject. It gave the technical names for different types of barbiturates, as well as the street/slang names. It was very useful in giving the timeline of the drug starting from the discovery in 1864 by Belgian researcher Adolf Von Baeyer. It explains the progression and changes of the drug until the mid 1960s. It was now apparent that Barbiturates could have harmful and devastating effects and the “U.S Drug Abuse Control Amendment prohibits the unregistered possession, manufacture or sale of barbiturates...” Also very useful from this Web site was the page with personal testimonies of people who were either once addicted, still addicted or had some kind of experience with barbiturates. I considered this a good source.

- **Web site #2: “U.S Drug Informant Administration”**
(Score: 20)
- **Web address:** <http://usdoj.gov/dea/concern/barbiturates.html>
- **Information:**
 - The Web site explains the development of the drug and a minimal explanation of the progression of the drug up to present. There has been, since its development, over 2,500 types of barbiturates synthesized from the original. This Web site does go into the schedules of the drug and how each one effects the human body. There are time frames that characterized each schedule. It goes into detail the concept of “ultra-short acting” barbiturates, which are used for insomnia and pre-operative sedation. There are also “long-acting” barbiturates. This type is used for “daytime sedation and treatment of seizure disorders” because of its 12 hour effect. This Web site helped me to be more aware of some of the effect and the drug, not so much of the background however. This Web site also did not have useful resources or other links.
- **Web site #3: “Dove Medical Press, Neuropsychiatric Disease & Treatment”**
(Score: 26)
- **Web address:** <http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=2424120>
- **Information:**
 - This Web site gives an in depth and highly intellectual explanation on the background of barbiturates. The information is based around its psychiatric and neurological uses. Barbiturates were original used to treat neurological diseases such as schizophrenia and also epileptic seizures. Before the sedative and hypnotic effects of barbiturates were developed, alcohol, opium and other narcotic plants were used. Instead these sedative and hypnotic side effects of the drug made it very useful in psychiatric institutes and asylums. I felt this Web site was useful, however not extremely user friendly.
- **Web site #4: “Nobleprize.org”**
(Score: 24)

- **Web address:**
http://nobelprize.org/nobel_prizes/chemistry/laureates/1905/baeyer-bio.html
- **Information:**
 - In considering the background of barbiturates, I thought it valid to recognize the man behind the drug. On “Nobleprize.org,” Adolf von Baeyer is categorized under chemistry for his life’s work in physics and chemistry. He was born October 31, 1835 in Berlin. He later attended the University of Berlin, while also working at many laboratories in the area. He became famous for his work on the color indigo; “the blue dye fascinated him since youth.” Baeyer won the Nobel Prize for his work in chemistry in 1905. “He was careful never to overestimate the value of theory.” This Web site was very interesting, not very helpful in my research about barbiturates though.

Section 2: Research

- **Web site #1:** “Good Sleep for Good Health” (Score: 20)
- **Web address:** <http://www.sleepdex.org/barbiturates.htm>
- **Summary of the research:** This Web site mostly focus’ on the use of barbiturates by categorizing them into three types; Amobarbital, Pentobarbital and Secobarbital. The effects of the drug vary on what type is ingested. It “can become habit forming and [is] usually taken for their strong sedative effects.” This Web site is slightly random in that the information jumps around a lot from types of the drug to the fact that because barbiturates suppress R.E.M., they should not be taken for a long period of time.
- **Web site #2:** Wikipedia, The Free Encyclopedia (Score: 25)
- **Web address:** <http://en.wikipedia.org/wiki/barbiturate>
- **Summary of the research:** Beginning with the definition of barbiturates, Wikipediea explains that “Barbiturates are drugs that act as central nervous system depressants, and by virtue of this they produce a wide spectrum of effects, from mild sedation to anesthesia.”

Barbiturates have other uses such as treating anxiety, creating hypnosis and used as an anti-convulsing agent. They can be used in an intra-venous line for general anesthetics in conjunction with other anesthetics such as nitrous oxide in pre-op conditions. There are types of barbiturates known for the length of their effects; ultra-short, short, immediate and long acting. Depending on the need, a certain barbiturate will be prescribed. The Web site also goes into detail about overdosing, tolerance levels and its recreational usage. This was a very useful and user friendly Web site. It was easy to navigate and understand.

- **Web site #3: “Neuroscience for Kids” (Score: 28)**
- **Web address:** <http://faculty.washington.edu/chudler/barb.html>
- **Summary of the research:** This Web site was obviously very “kid-friendly” and extremely easy to follow and understand; ideal for a younger student who are the target audience. The Web site gives a brief explanation of the history of barbiturates including its first medical use in 1903 and how since it has evolved into many types of barbiturates. According to the Web site, the drug affects the brain because it is easily absorbed by fat making it very accessible to the brain. In low doses, the drug can reduce anxiety, blood pressure, heart rate and R.E.M. In large doses it can decrease the brains inhibitory behavior. Regular use of this drug can build a tolerance, meaning more of the drug is needed to achieve the same effect. This was a useful Web site.
- **Web site #4: “Medline plus, trusted Health Information for you” (Score: 27)**
- **Web address:** <http://www.nih.gov/medlineplus/print/ency/article/000951.htm>
- **Summary of the research:** This Web site gives the most headings of information on barbiturate overdose. It was very helpful and informative in explaining the effects, symptoms, signs of dependency and test to perform for barbiturate abuse. There is a similarity between the effects of alcohol and barbiturates. A low dose can cause “relaxation and sleepiness.” However, higher doses can cause “chronic symptoms” such as “memory loss, irritability, changes in alertness and decreased interpersonal functioning.” Also, abuse at barbiturates “is still a major addiction problem” and begins when a person starts to misuse their prescription or that of a friend or family member. To test for barbiturate use, urine can be used to detect the drug in the body. Mixing barbiturates with other

drugs such as heroin or oxycotin is a common practice amongst abusers and addicts. This Web site was very informative, especially in the area of addiction.

Section 3: Statistics

- **Web site #1:** “Greater Dallas Council on Alcohol and Drug Abuse”
(Score: 22)
- **Web address:** <http://www/gdcada.org/statisitcs/barbiturates.htm>
- **Summary of the statistics:** This site was not helpful at all in terms of finding statistics regarding the use of barbiturates. The Web site only gave facts about the drug such as street names, how they are used, and the short and long-term effects of the drug. Even though the word statistic is in the web’s ‘url’, I found none on this Web site.
- **Web site #2:** “Pub Med Central” **(Score: 21)**
- **Web address:**
<http://www.pubmedcentral.nih.gov/articlerender.fcgi?rtid=1936564#reference-sec>
- **Summary of the statistics:** This Web site brought me to an article entitled “Toxicology Statistics for Barbiturates, Other Sedatives, and Tranquilizers in Ontario: a 10 year study.” Since the article was written outdated 1966, the information is outdated and statistics older. However, according to early research this is the time period in which barbiturates are more widely used. There is a steady and steep increase in death by barbiturate from 1955 to 1964. Although, the study takes place in Ontario, Canada, it was useful in understanding some older statistics about barbiturates. It did however lack points in the current information area.
- **Web site #3:** JStor, Trusted Archives for Scholarship
(Score: 24)
- **Web address:** <http://www.jstor.org>
- **Summary of the statistics:** This Web site, like the previous one, brought me to an article written by Henry G. Gramblett entitled “The Uses of and Poisoning by Barbiturates.” The article goes into the background of barbiturates and then a paragraph entitled statistics on usage goes into detail about those statistics. The statistics are as follows: 1932-1936 Barbiturates are responsible for 4.2% of all suicides. 66% were used in all suicide attempts. Between 1928-1937

643 admissions to hospital, out of 1,254,464, were barbiturate poisoning. 7.3% of those were fatal. As far as what exact hospital these facts are taken from, the article does not say. There for, the statistics are interesting, but not very useful. They are also not very current which made this Web site less helpful as well.

- **Web site #4:** “The Victorian Drug Statistic Handbook 2005”
(Score: 21)
- **Web address:**
http://www.health.vic.gov.au/drugservice/downloads/hbook_2005.pdf
- **Summary of the statistics:** This Web site originates from Victoria, Australia. There is no relevance to the United States, however it is important to take into consideration how other cultures deal with drugs as well. This Web site explains that Victoria, statistically does not use barbiturates as much as other tranquilizers and sedatives. However, tranquilizers are “among the most commonly prescribed drugs in Victoria.” In 1995, 1.3% of households had tried Barbiturate and by 2004 on .8% had. In 1995, .3% where using barbiturates and not much had changed by 2004. The statistics were helpful, even though they are from another country; they are still relevant to the drug itself, which by the nature of most drugs, knows no state, regional, or political boundary.

Section 4: Consumer Information

- **Web site #1:** “Walton on the Web” (Score: 23)
- **Web address:** www.watton.org/drugsinfo/aboutbarbs.shtml
- **Summary of the information:** This Web site would be useful to a person who is unaware of the health problems and risks of barbiturates. This Web site explains not only common street names, but also how they can be ingested in a non-medical necessary way. There is a huge risk of taking barbiturates. The risk of dependency is very likely and withdrawal symptoms can be fatal. Overdose is easy when a tolerance builds and only a few more milligrams are taken. There is also a great danger in mixing barbiturates with other drugs and/or alcohol. This Web site would be helpful in explaining the risks to a product consumer.
- **Web site #2:** “Streetdrugs.org” (Score: 19)

- **Web address:** <http://www.streetdrugs.org/barbiturates.htm>
- **Summary of the information:** The Web site gives a brief background information on barbiturates such as when it was developed. For consumer information, the streetdrugs.or talks about the usage of barbiturates. It goes into detail about the ultra-short acting barbiturates, schedule II, III and IV. Abusers prefer schedule II for its short acting/intermediate acting effect. Schedule IV is for sedation and treatment of seizures, as it can last up to 12 hours. The Web site was helpful, however it could have gone into more detail about the effects of the drug, but explaining the various schedules could be informative for a consumer.
- **Web site #3: “The Site.org” (Score: 27)**
- **Web address:** <http://www.thesite.org/drinkanddrugs/drugsafety/drugsatoz/barbiturates>
- **Summary of the information:** This Web site was very useful. It gave background information and was very informative in the risk sub-category. The Site.org explains the risk of building a tolerance and the dangers of mixing barbiturate dose with even a small amount of alcohol or any other drug. This can have a disastrous outcome. The withdrawal symptoms are extremely severe and have the ability to cause death. Injection of the drug is the most dangerous way to ingest the drug because it becomes extremely fast acting. Also helpful was the information on the class the drug falls under concerning the law. Barbiturate is a class B drug, which means it is only legal under a prescription. It also has a heading “If you are planning on taking barbiturates.” It basically scares the consumer by explaining that you are putting yourself and loved ones at a greater risk for accidents and making you aware of the extremely high risk of addiction, overdose and possible death.
- **Web site #4: “Shaffer Library of Drug Policy (Score: 20)**
- **Web address:** <http://www.druglibrary.org/schaffer/library/studies/cu/cu28.htm>
- **Summary of the information:** The Web site is a well-written dissertation about barbiturates. Something I found interesting is in the first line of the second paragraph; “two of the most common afflictions for which humans being through the centuries have sought relief in drugs are anxiety and insomnia.” These drugs have been prescribed since the 19th century. The Web site can help inform

consumers on the risk of taking short or long lasting barbiturates. There is an increase risk or forming an addiction problem when taking barbiturates and the symptoms of these drugs are much like alcohol; uncoordination, nausea, and loss of inhibitions. This was not the best Web site for consumer information because it also talked about the effects of alcohol and other tranquilizers.

Conclusions

- **Section 1: Background and Statement**
 - **The best Web site “The Vaults of Erowid”**

This Web site was very user friendly, gave good information, navigating around the site was easy and it was also visually stimulating. It gave an abundance of information that was easy for the general public to comprehend.
 - **The worst Web site “U.S Drug Enforcement Administration”**

This Web site was short, had very minimal information. The webpage was “cold,” harsh in enforcing the law and had no graphics, no heading and there were only three paragraphs of information.
- **Section 2: Research**
 - Jimmy Hendrix died of an overdose on barbiturates. “Neuroscience for Kids”
 - Barbiturates have different dosages from ultra-short acting to long acting, and this has a significant effect on patient.
- **Section 3: Statistics**
 - Scholars have been taking statistics on barbiturates from the mid-late 1920s. One statistic that is new to me is that between 1928-1937, 643 admissions to hospital were barbiturate poisoning.
- **Section 4: Consumer Information**
 - **The best Web site “The Site.org”**

The Web site was the best for consumer information because it was extremely easy to understand but very informative on the risks of taking barbiturates. The target audience is teenagers and young adults, so the page also had a lot of related topics and ways to seek help and more information.
 - **The worst Web site “Street Drugs.org”**

This Web site was very forgettable. It had very little graphics, headings and sub-headings. The information was minimal and slightly repetitive.

Back to Betty C. Jung's Web site	http://www.bettyjung.net/
Back to Web site Critique Reports Directory	http://www.bettyjung.net/Pch201wsreports.htm