**Internet data**

To enrich the article with information regarding the recreational/voluptuary consumption of quetiapine, we collected data from the internet. To this end we selected websites containing user forums that comment on the use of quetiapine, and among these we have chosen those with the best global page rank estimated according to Alexa.com statistics. This parameter coincides with the algorithm used by Google to place the results of a search in a progressive order on the Results pages. The first two selected forums enjoyed better positioning than the major search engines and therefore were considered the most popular for the period covered by this research. In addition, the forums were more structured and systematised in content, with the highest number of participants. For this reason, the collected information through www.erowid.org (actually 24,359th worldwide website based on global rank) and www.bluelight.org (32,300th worldwide website based on global rank). From these sources we have collected blogger comments. These were blogs that included self-reports of quetiapine effects when taken for recreational/voluntary purposes; many of these users have experienced different effects than those reported in the scientific literature.

Some bloggers did not agree on the subjective effects of quetiapine. Many reported cocaine-like highs, while others reported sleepiness after or during cocaine binges. One with an indirect sleepiness experience was astonished to find on the internet a multitude of reports of cocaine-like cues. Some patients increase unsuccessfully their quetiapine doses to obtain restful sleep, worsening their clinical picture (Cornelis et al., 2016).

Many users/abusers reported feeling bad, “sore” and unable to concentrate; one abuser characteristically stated “Seroquel is evil”.

In one self-report, an abuser tried a Q-ball but did not obtain any positive effect. In fact, he reported that Seroquel has ruined the effects of cocaine and has experienced no hallucinogenic effects. A participant reported that a friend of his took Seroquel intravenously, and subsequently fell in coma, suffered severe heart valve inflammation, and eventually died.

Another participant claimed to snort quetiapine to immediately halt a panic attack or to calm his craving; however, animal and human data do not support an anticraving effect for quetiapine for all substances in all samples. While anticraving effects were shown with quetiapine for sedative drugs like opioids (Pinkofsky et al., 2005), for alcohol both positive (Martinotti et al., 2008) and negative results were obtained (Mendelevich & Zalmunin, 2015), for marijuana, quetiapine either did not affect or enhanced craving (Cooper et al., 2013), while for cocaine results are not consistent (Indave et al., 2016). Other users stated having seen some of their friends being “very out of their head” after sniffing “Suzie-Q”. Another user reported that he snorted quetiapine and then felt angry, that everything was “blurry” and “spinning”. Still another reported some detachment from environment, stating that “the effect of Seroquel is more one of feeling distant and detached from anxiety/worry/stress - like you're observing it from the outside or through thick glass.”

A report that deserves emphasis is that of a user with bipolar disorder who experienced the feeling of being “distant” and “detached” from anxiety, worry and stress, “like if you’re observing it from the outside or through a thick glass”, a derealisation or abnormal self-experience that is often shared by prodromal psychosis, panic disorder, and dissociative disorders.

In most cases, quetiapine doses taken by users/abusers are unknown, as is the possible self-co-administration of other substances, hence the difficulty to interpret the effects experienced by these people. However, these reports underscore the increasing spread of quetiapine misuse and the importance of further studies of this phenomenon.

Bloggers in sites like [www.bluelight.org](http://www.bluelight.org) comment on quetiapine use in a way unseen in serious medical literature, casting into doubt the truthfulness of the reports or, alternatively, clouding the clinical picture through inaccurate descriptions of their symptoms and sensations. Generally, reporters are sure about their views that often contrast scientific evidence. This fact prompts us to consider descriptions as being unreliable and unwarranted, but it is also likely that these people made their opinion in a shared cultural milieu which creates views about recreational quetiapine use, that cannot be corroborated in controlled clinical settings, i.e., people experience quetiapine effects that quetiapine does not have of its own, but are rather the result of wishful thinking, similar to placebo effects.

Mining the social media may provide a different picture from the one obtainable when searching scientific databases, which indicate a low potential of abuse for quetiapine, when the drug is commonly reported to be use for non-medical uses on Internet sites, like Twitter (Sarker et al., 2016).

**PICO Worksheet and Search Strategy**

1. Define your question using **PICO**: Population, Intervention, Comparison, and Outcome.

Population: \_\_\_\_Any\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Intervention: \_\_\_\_\_Quetiapine assumption for voluptuary reasons\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Comparison: \_\_\_\_\_\_Other antipsychotic drugs\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Outcome: \_\_\_\_\_\_\_Assessment of misuse\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Write out your question: \_\_\_\_Is quetiapine likely to be abused, and by whom?\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. List the main topics and terms from your question that you can use to search.

\_\_\_\_\_\_\_Quetiapine\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_Misuse/abuse\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_Inmate populations\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_Street addiction\_\_\_\_\_\_\_\_

1. Check any limit that may pertain to your search:

\_None\_ Age \_None\_ Language \_Any\_ Year of publication

1. Type of study/publication you want to include in your search: (From Step 2 of tutorial)

|  |  |
| --- | --- |
| \_X\_ Systematic Review or Meta-Analysis  \_X\_ Clinical Practice Guidelines  \_X\_ Critically Appraised Research Studies | \_X\_ Individual Research Studies  \_\_ Electronic Textbooks |
|  |  |

1. Check the databases you searched:

|  |  |
| --- | --- |
| \_X\_ Cochrane Library  \_\_ Joanna Briggs | \_X\_ CINAHL with Full Text  \_X\_ PubMed Clinical Queries \_X\_ Other |

1. What information did you find to help answer your question?

\_\_\_\_Reporting by peers of quetiapine off-label use by patients or other people\_\_\_\_\_\_\_\_\_\_\_\_\_\_

This form is adapted from: Syrene A. Miller, PICO Worksheet and Search Strategy, National Center for Dental Hygiene Research

