



Domenico Berardi  
Dipartimento di Scienze Mediche e Chirurgiche  
Università di Bologna

## cannabis e psicosi

studio prospettico nei servizi di salute mentale

**"La Cannabis tra stigma e normalizzazione"**  
TEORIE, PRATICHE, POLITICHE

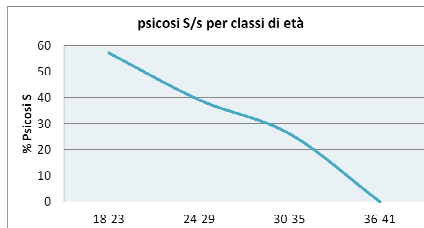
Lavoro a proposte di approprate azioni educative di studio diretto sulle comunità a seguito delle richieste intervenute a livello legislativo.

27-28 Novembre 2014  
Attilio Zanzi, Via Zamboni, 33, Bologna  
Dipartimento di Scienze dell'Educazione, Università di Bologna

## Psicosi da sostanze nei Centri di Salute Mentale di Bologna

First-episode psychosis at the West Bologna Community Mental Health Centre: results of an 8-year prospective study

I. Tartarone<sup>1,2</sup>, S. Mammì<sup>3</sup>, A. Paganelli<sup>4</sup>, E. Rossi<sup>5</sup>, E. Mori<sup>6</sup>, S. Fanigada<sup>7</sup>, C. Caccia<sup>8</sup>, V. Baudini<sup>9</sup>, R. Micheli<sup>10</sup>, G. Minerva<sup>11</sup>, J. Bujoldi<sup>12</sup>, C. Merga<sup>13</sup> and D. Rossini<sup>14</sup>



Psychiatry Medicine, Page 1 of 10. © Cambridge University Press 2012. doi:10.1017/S0012282412000105 ORIGINAL ARTICLE

### First-episode psychosis at the West Bologna Community Mental Health Centre: results of an 8-year prospective study

I. Tartarone<sup>1,2</sup>, S. Mammì<sup>3</sup>, A. Paganelli<sup>4</sup>, E. Rossi<sup>5</sup>, E. Mori<sup>6</sup>, S. Fanigada<sup>7</sup>, C. Caccia<sup>8</sup>, V. Baudini<sup>9</sup>, R. Micheli<sup>10</sup>, G. Minerva<sup>11</sup>, J. Bujoldi<sup>12</sup>, C. Merga<sup>13</sup> and D. Rossini<sup>14</sup>

**Flowchart:**

- 206 pazienti al primo episodio psicotico (ICD-10 F20-F29 e F30-F33) che accedevano per la prima volta al CSM Ovest 2002 - 2009
- 14 pazienti al primo episodio psicotico (likeage study)
- 163 casi
- 57 esclusi per psicosi organica; disturbo non psicotico; precedenti episodi psicotici; non permesso di residenza; altri motivi
- 120.00 Popolazione età 18-64 nel bacino di utenza

Incidence rate of various Psychoses	Age and sex Adjusted Rate (95% CI)
Psychoses	16.4 (13.9 - 18.9)
Non affective psychoses (F20 - F 29)	12.1 (9.0 - 14.3)
Schizophrenia (F20 & F 25)	7.7 (6.0 - 9.4)
Affective Psychoses (F30 - F33)	2.1 (1.2 - 3.0)
Substances Related Psychoses F10-19	2.2 (1.3 - 3.1)

Results. The overall incidence rate (IR) in the B&ECP study was 16.4 per 100,000 person-years [95% confidence interval (CI) 13.9-18.9]. The incidence was higher in young people, men and migrants (M).

Psychiatry Medicine, Page 1 of 10. © Cambridge University Press 2012. doi:10.1017/S0012282412000105 ORIGINAL ARTICLE

### First-episode psychosis at the West Bologna Community Mental Health Centre: results of an 8-year prospective study

I. Tartarone<sup>1,2</sup>, S. Mammì<sup>3</sup>, A. Paganelli<sup>4</sup>, E. Rossi<sup>5</sup>, E. Mori<sup>6</sup>, S. Fanigada<sup>7</sup>, C. Caccia<sup>8</sup>, V. Baudini<sup>9</sup>, R. Micheli<sup>10</sup>, G. Minerva<sup>11</sup>, J. Bujoldi<sup>12</sup>, C. Merga<sup>13</sup> and D. Rossini<sup>14</sup>

**Bar chart: diagnoses**

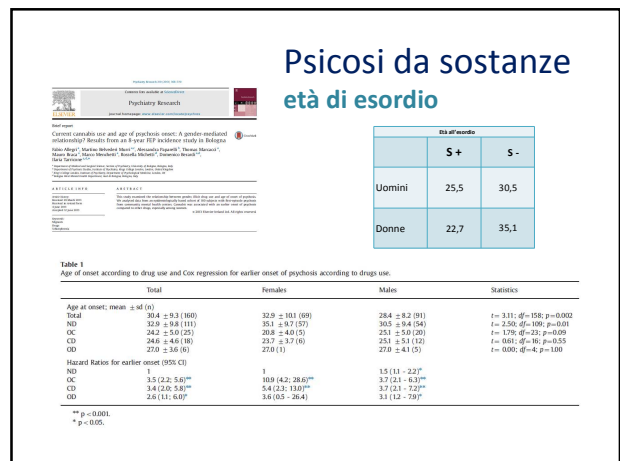
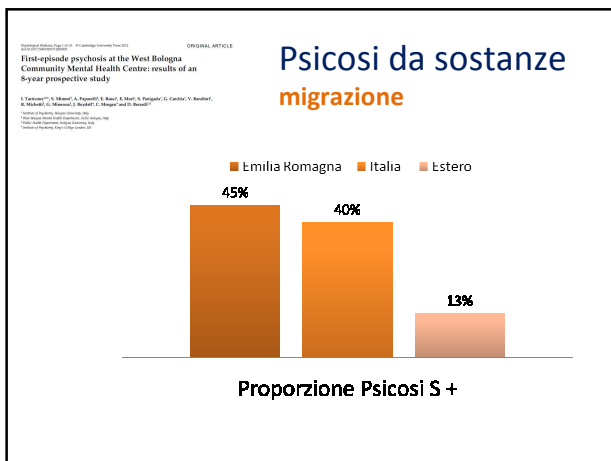
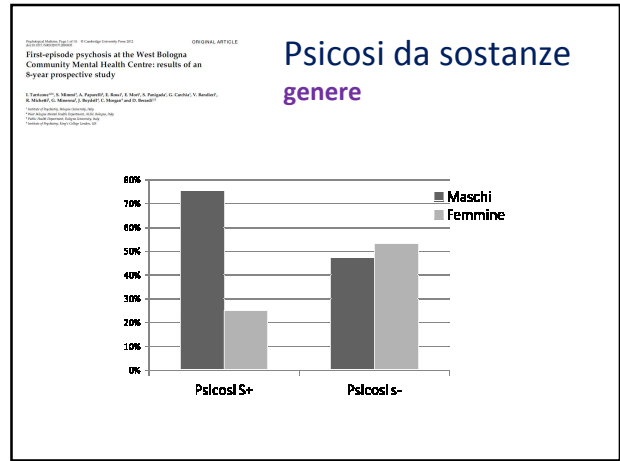
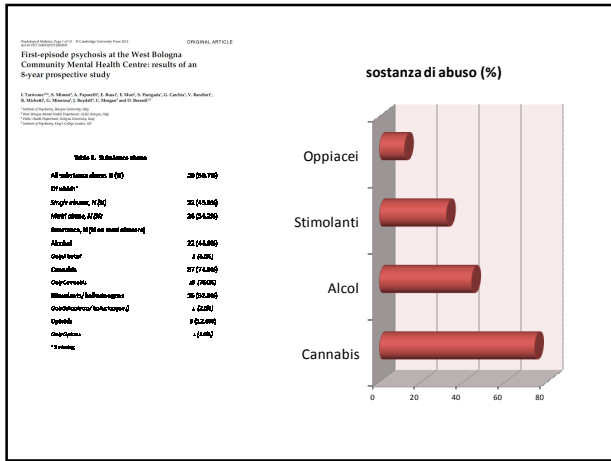
Diagnosis	%
Substance induced psychoses	~12
Dual diagnosis harmful use	~16

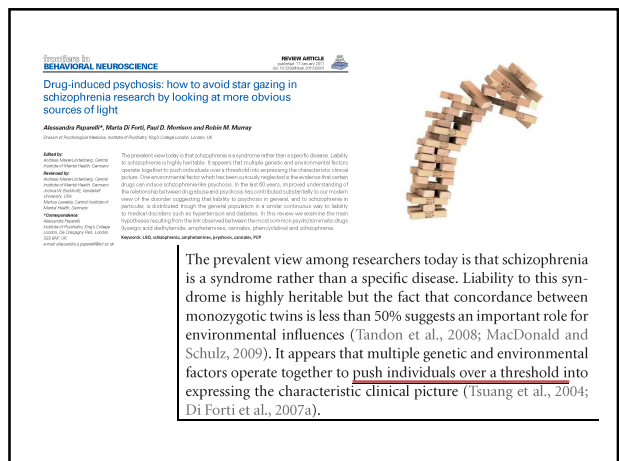
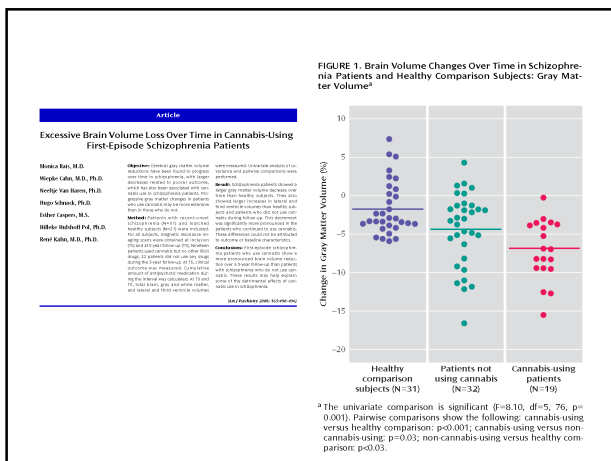
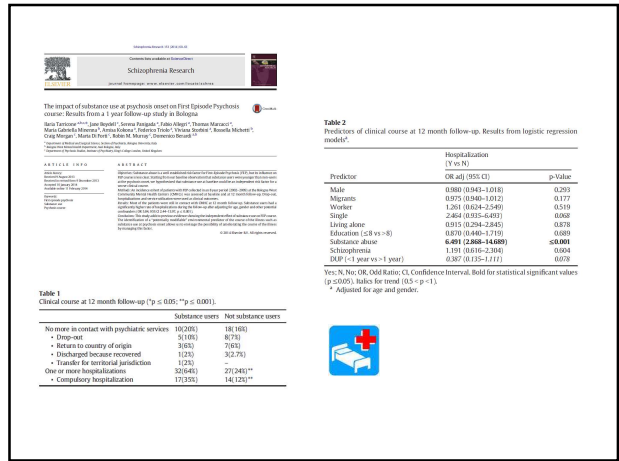
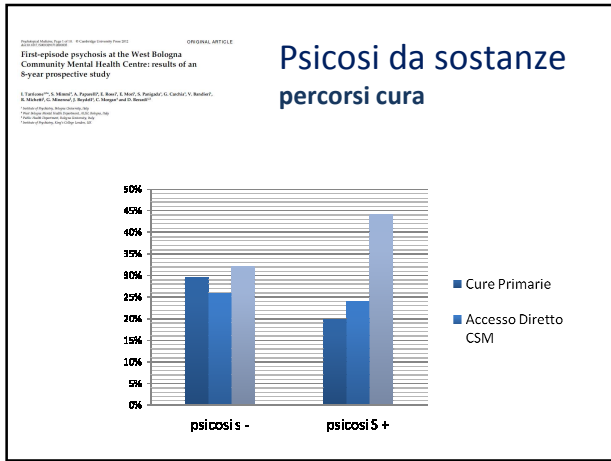
**Sindrome Psicotica da Sostanze**

- La sostanza è assunta prima dell'esordio dei sintomi
- I sintomi si risolvono completamente in 6 mesi
- I sintomi continuano indefinitamente se continua l'esposizione
- I sintomi sono di severità proporzionata a qualità e quantità della sostanza
- Assenza di sintomi negativi

**Schizofrenia:**

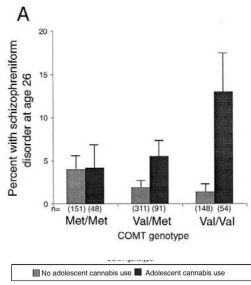
- I sintomi sono insorti prima della sostanza
- I sintomi continuano nonostante riduzione/sospensione della sostanza
- Sono presenti sintomi negativi
- I sintomi sono troppo gravi rispetto a quantità e qualità della sostanza assunta





**Moderation of the Effect of Adolescent-Onset Cannabis Use on Adult Psychosis by a Functional Polymorphism in the Catechol-O-Methyltransferase Gene: Longitudinal Evidence of a Gene X Environment Interaction**

Journal of Abnormal Psychology, 2010, 119(4), 441-452. doi:10.1037/a0018888. Copyright 2010 by the American Psychological Association. 0893-3200/119/4-441\$12.00 DOI: 10.1037/a0018888



**SCIENCE AND SOCIETY**

**Cannabis, the mind and society: the hash realities**

Robin M. Murray, Paul D. Morrison, Cécile Henquet and Marta Di Forti

**NATURE REVIEWS | NEUROSCIENCE**

**Table 1 | General population studies of the effect of cannabis use on the risk of psychosis**

Country in which the study was conducted	Number of participants	Follow up	Odds ratio (95% confidence interval)	Study design	References
United States	4,494	NA	2.4 (1.2, 7.1)	Population based	147
Sweden	50,053	25 years	2.1 (1.2, 3.7)	Conscript cohort	78,79
The Netherlands	4,045	3 years	2.8 (1.2, 6.5)	Population based	84
Israel	9,724	4–15 years	2.0 (1.3, 3.1)	Population based	148
New Zealand (Christchurch)	1,265	3 years	1.8 (1.2, 2.6)	Birth cohort	85
New Zealand (Dunedin)	1,253	15 years	3.1 (0.7, 13.3)	Birth cohort	80
The Netherlands	1,580	14 years	2.8 (1.79, 4.45)	Population based	149
Germany	2,436	4 years	1.7 (1.1, 1.5)	Population based	100
United Kingdom	8,580	18 months	1.5 (0.55, 3.94)	Population based	150

NA, not available



European Journal of Pharmacology  
Journal homepage: www.elsevier.com/locate/ejphar

**Review**

**Cannabis and the developing brain: Insights from behavior**

Viviana Trezza<sup>a,b</sup>, Vincenzo Cuomo<sup>b</sup>, Louk J.M.J. Vanderschuren<sup>a</sup>

<sup>a</sup> Radboud University of Nijmegen, Department of Neuroscience and Pharmacology, University Medical Center Nijmegen, Nijmegen, The Netherlands; <sup>b</sup> Department of Brain Physiology and Pharmacology, University of Bari, 'Sapienza', Bari, Italy

**ARTICLE INFO**

**ABSTRACT**

**2.3.2. Effects of cannabinoids on neurotransmitter maturation**  
There is a large body of evidence that exposure to cannabinoids during critical periods for brain maturation can affect the development of several neurotransmitter systems. In particular, several studies have demonstrated effects of cannabinoids on the maturation of catecholaminergic (Fernandez-Ruiz et al., 2000; Garcia-Gil et al., 1997; Hernandez et al., 2000), serotonergic (Molina-Hojgado et al., 1997, 1996), GABAergic (Garcia-Gil et al., 1999), glutamatergic (Suarez et al., 2004) and opioid systems (Fernandez-Ruiz et al., 2004; Kumar et al., 1990; Vela et al., 1998; Wang et al., 2006).

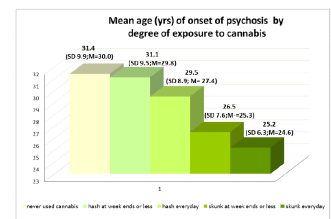
alcohol (CHCL), the primary psychoactive alcohol research. The exploration of the novel compounds was paralleled by the system and their endogenous ligands. The brain involvement in specific brain the endocannabinoid system plays an role, proliferation, migration and of high neuronal plasticity, such as the endocannabinoid consequences. Here, we neurobiology of effects of in vitro and only used and abused by young people, but also in the developing brain, leading to a serious health issue. In addition, we target for the treatment of several effects of cannabinoid compounds on the central nervous system (CNS) of immature individuals is warranted.

© 2008 Elsevier B.V. All rights reserved.



**Daily use, especially of high-potency cannabis, drives the earlier onset of psychosis in cannabis users.**  
Di Forti M<sup>a</sup>, Sallis JF<sup>a</sup>, Alagiri E<sup>a</sup>, Tzolis A<sup>a</sup>, Ferrante V<sup>a</sup>, Sallis SP<sup>a</sup>, Mancusi A<sup>a</sup>, La Capanza C<sup>a</sup>, Batta Manassis V<sup>a</sup>, Daskalaki C<sup>a</sup>, Di Ciccio P<sup>a</sup>, Mavrouli V<sup>a</sup>, Paparelli A<sup>a</sup>, Kollakou A<sup>a</sup>, Smith DM<sup>a</sup>, Gaughran EA<sup>a</sup>, David ASP<sup>a</sup>, Murray RM<sup>a</sup>, Murray RM<sup>a</sup>.

**Figure 3**



The graph illustrates that subjects who never used cannabis experience their first episode of psychosis at the oldest ages (mean ages in years) compared to those who used cannabis. In addition, the greater the degree of exposure to cannabis (cannabis exposure scale expressed in type x frequency), the younger is the mean age of onset of psychotic disorders. SOI=standard deviation. As the age of onset is not normally distributed we also report the median age in years (SOI=median).

