Oriana Josseau Kalant, 1920–2001: a remarkable scientist, a remarkable woman



Oriana Josseau Kalant

Oriana Josseau Kalant died on 21 November 2001, in Toronto, Canada, after a long struggle with cancer. A long-time Senior Scientist at the Addiction Research Foundation, Toronto, she was 81 years old. Although her writings were well-known and respected, Oriana Kalant was not well known personally to many in the addiction research community because recurring medical problems over the past several decades had prevented her from attending most of the scientific meetings. However, those who did have the privilege to meet her remember her as a vivid and forceful presence.

Oriana was born into an affluent sheep-ranching family in Punta Arenas, Chile, on the Straits of Magellan in 1920. The family moved to Santiago when she was 7 years old. Within a short time the family wealth was lost and they were supported thereafter by her mother's skill as a dressmaker. In keeping with attitudes then prevalent in Latin America Oriana was expected to help run the household, but her mother strongly supported her aspirations to an independent career. Oriana excelled in her academic pursuits and read voraciously in Spanish, French and English. Although at one time she had hoped to become a nun (and a Mother Superior), in her early teens she rebelled against what she perceived as the narrow-mindedness of the nuns, who seemed to care little about the world beyond their own experiences. This early manifestation of independence of thought and refusal to bow to authority, as well as an intense need to explore and take cognizance of the experience of other

cultures, would later re-emerge in much of Oriana's scholarly writings.

At university she broke more conventions by plunging enthusiastically into mountaineering, skiing, student politics and the arts. She once pawned her wrist-watch in order to be able to buy a series ticket to hear Claudio Arrau perform the complete set of Beethoven piano sonatas.

Oriana Kalant's scientific career began in Chile in the early 1940s. Precluded from studying medicine by the family's financial circumstances, she studied chemistry instead at the School of Chemistry and Pharmacy at the University of Chile. Upon completing her degree, she accepted a staff position in the Institue of Physiology at the University. Based on her excellent academic record, she was initially awarded a Rockefeller Foundation fellowship for graduate work in biochemistry in the United States, but her receipt of the fellowship was blocked by the regional representative of the Rockefeller Foundation, who believed that most women got married, had babies and dropped out of research and were therefore 'poor investments'. This experience reinforced her alreadygrowing determination to advocate for women's rights. especially in science.

However, her professor at the Institute of Physiology, Francisco Hoffman, helped her to obtain support to work in the laboratory of Professor Charles Best in Toronto. She met Harold Kalant, her future husband, while working on her MSc at the Banting Institute. They were married in 1948 and returned to Chile, which Oriana was obliged to do for 2 years as repayment for the support she had received to study in Toronto. During that time she became the first woman to lecture to the medical students in the University of Chile. In 1950 the Kalants returned to Toronto, where they both completed graduate studies. Immediately after earning their doctorates, in 1955, they embarked on postdoctoral fellowships at Cambridge. It was there that Oriana first experienced the severe depression that would restrict her scientific activities and from which she would recover only after many years of treatment.

In the early 1960s, back in Toronto, although still handicapped by the residual symptoms of depression, Oriana was asked to undertake a literature review on amphetamine abuse for the provincial government of Ontario. The report she produced was of such scope and

scholarship that it was published as a monograph by the Addiction Research Foundation in 1966. The impact of this review, on the conceptualization of amphetamine-like agents as potentially addictive drugs, was significant. For example, a leading textbook of pharmacology published in 1965 was hesitant to declare that amphetamine-like drugs were likely to lead to abuse and addiction, but the 1970 edition of that same textbook stated clearly that amphetamines could lead to addiction, and also noted that the more benign views of those drugs had arisen because insufficient attention had been paid to the post-World War II amphetamine epidemic in Japan. The shift in thinking had been given considerable impetus by Oriana Kalant's review.

The review of amphetamines led to other ARF assignments that established Oriana Kalant's reputation as a critical and unbiased reviewer. In the process of her work she built what was, at the time, the most complete archive on cannabis and cocaine in North America. This archive was used as a major resource for the reports of the influential LeDain Commission in Canada, the ARF-WHO Working Group on Cannabis (1981) and a US Institute of Medicine Report in 1982. She published a number of reviews of older classic works on psychoactive drugs, such as Moreau's *Du Hachisch et de l'Alienation Mentale* and the *Report of the Indian Hemp Drugs Commission of* 1893–1894, bringing these works to the attention of the modern day scientific community.

In the early 1970s, at the height of international concern about the rapid spread of marijuana use among the young, Oriana wrote a series of lucid analyses of the problem of differentiating between factual knowledge, value judgements and political feasibility in the formulation of drug policy. These analyses were intended originally for governments and educators but, with Harold Kalant as co-author, she reworked them into a small but influential paperback, *Drugs, Society, and Personal Choice*, which has been reprinted in several languages.

Oriana recognized early on that most of the research on drug problems focused primarily on the behaviour and problems of men, and that these problems are not necessarily the same in women. This awareness, and her interest in women's issues, led her to undertake the editorship of a multi-authored volume, *Alcohol and Drug Problems in Women*. Her broad and deep scholarship in relation to amphetamines allowed her to see important similarities in the emerging cocaine epidemic, which those unfamiliar with previous epidemics of cocaine addiction tended to see as relatively benign. Anticipating a need to look back at previous experience with cocaine, Oriana undertook to translate into English and edit an all but forgotten 1925 classic, Maier's *Der Kokainismus*. This publication received the *British Journal of Addiction* prize for the best book reviewed in the journal during 1988.

Much of her work, which recognized the role of history, culture and social values in shaping how a society defines and reacts to drug problems, was undertaken while Oriana was confined to her home by a mounting list of medical problems. These problems were met, as she had met other challenges in her life as a woman in science, with indomitable spirit, great discipline and a wry sense of humour. Despite these continuing problems, she finally triumphed over her depression and her later years, enriched by strong friendships, enthusiasm for her newly discovered ability at non-scientific writing and a deep love of gardens and of the natural beauty of Ontario's landscapes, were among the happiest of her life.

Oriana is survived by her husband, Dr Harold Kalant, Professor Emeritus of Pharmacology in the University of Toronto, and by her younger brother Fernando Josseau, a noted Chilean playwright and author.

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