

Remembering Dr. E. Keith Borden, Inaugural President of the Canadian Association for Population Therapeutics

TORONTO, Ontario - August 01, 2019

The Canadian Association for Population Therapeutics / Association Canadienne pour la Thérapeutiques des Populations (CAPT-ACTP) Board of Directors and staff are deeply saddened by the recent passing of one of our founders, as well as our inaugural President and an honorary lifetime member of CAPT-ACTP, Dr. E. Keith Borden, 1932-2019.

More than two decades ago, the idea of establishing a Canadian association with a focus on pharmacoepidemiology and pharmacoeconomics was discussed at length during meetings of the International Society for Pharmacoepidemiology. The efforts of Dr. Borden, who assumed leadership of the local organization and secured critical financing, resulted in the first two meetings of the Canadian Pharmacoepidemiology Forum, held in the city of Toronto in 1993 and 1994 respectively.

As shared by Dr. Borden's colleagues, Dr. Nigel Rawson and Dr. Roy West, "The time and effort required as the local organizer of a national conference is usually under-appreciated when things go well, which they did. Other associations can no doubt appreciate the amount of time and effort required to organize and resource a successful conference, especially one that had no precedent. At the 1996 meeting where CAPT was established out of the Forum, Keith became CAPT's first President and steered the Association through its first year. He continued to have a major role in the association for several years."

During Dr. Borden's distinguished career, he had a significant influence in developing post-marketing surveillance. While he was with The Upjohn Company, Dr. Borden and his colleague, Dr. John Lee (1), performed a feasibility study in the late 1970s in which staff in 11 United States pharmacies registered more than 70% of patients receiving an oral antibiotic. A subsequent questionnaire sent to the patients asking about benefits and problems during their use of the drug achieved a completed response rate of over 90%. Borden and Lee concluded that larger systems of that type were viable and could be established at a reasonable cost.

The same approach was used to study non-steroidal anti-inflammatory drugs, acne drugs and benzodiazepines in the United States, and a pre-test of the method to study benzodiazepines was performed in Canada (2). The method was revived in the 1990s to study drug utilization in Canada in the Pharmacy Medication Monitoring Program at McMaster University (3), although patient questionnaires were administered by telephone. The program achieved a good level of response from patients—80% or higher—in several studies, illustrating once again that collecting information directly from patients is a practical option.

Dr. Borden also assumed a major role in other studies (4,5) demonstrating that numerous flaws existed in the system of evaluating and listing drugs for reimbursement in provincial formularies, leading to significant disparity in reimbursed drugs between the provinces.

As the CAPT Board of Directors and staff reflect on the significant contributions of Dr. Borden in his chosen field, we believe Dr. Rawson perhaps expressed it best. "Keith Borden was one of the innovators in the identification and evaluation of post-marketing benefits and risks that existed in the 1960s to 1990s in the pharmaceutical industry, government and academia that we no longer see."

Dr. Borden will be greatly missed.



References

- 1. Borden EK, Lee JG. A methodologic study of post-marketing drug evaluation using a pharmacy-based approach. *J Chronic Dis* 1982; 35: 803–16.
- 2. Gardner JS, Baker MI, Borden EK. Postmarketing surveillance in Canadian pharmacies. *Can Pharmaceut J* 1984; 117: 57–9.
- 3. Willison D, Gaebel KA, Borden EK, Levine MA, Poston JW, Goldsmith CH, Wong B. Experience in the development of a postmarketing surveillance network: the Pharmacy Medication Monitoring Program. *Ann Pharmacother* 1995; 29: 1208–13.
- 4. West R, Borden EK, Collet JP, Rawson NSB, Tonks RS. "Cost-effectiveness" estimates result in flawed decision-making in listing drugs for reimbursement. *Can J Public Health* 2002; 93: 421–5.
- 5. West R, Borden EK, Collet JP, Rawson NSB, Tonks RS. Need for an improved submission process for listing drugs for reimbursement in Canadian provinces. *Can J Clin Pharmacol* 2003; 10: 207–10.