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## Cohort studies: What editors want from authors and peer reviewers

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**A**s we pointed out in our last editorial<sup>1</sup> the case subjects in a case-control study have the clinical problem of interest at the start of the study. In cohort studies all subjects are free of the outcome of interest at the time that the exposure or intervention begins. Depending on the objectives one or more cohorts are used. The validity of the cohort study rests on the care the authors take to prevent bias as they assemble the cohort, specify the exposure or risk factor of interest, follow the cohort, and define and measure the outcome of interest. Therefore, the authors should consider the following points as they prepare their manuscripts.

### The introduction

As in all reports of research the authors must state clearly the problem or question, why it is important and what specific hypothesis or research question they have undertaken to answer. In addition, they should justify their use of the cohort design. Cohort studies are often used for the assessment of risk factors, effects of exposure or prognosis; they may be less useful for the evaluation of therapeutic or preventive measures.

### The methods

The authors should define how they assembled the cohort. In doing so they should describe how the cohort was selected, stating the specific characteristics of the subjects. In particular, they should define the starting point well and ensure that it is the same

for each member of the cohort. They should describe the assessment of the exposure or risk factors thought to be related to the outcome under study. In addition, the authors must show that the subjects in the cohorts do not differ in any way other than the exposures or risk factors under study. Finally, they must demonstrate that none of the subjects had the outcome when the study began.

How and for how long the cohort was followed should be clearly described.

The authors must state how they measured the outcome of interest, what criteria they set and how they assured that all the members of the cohorts had an equal chance of having their outcome detected. Ideally, those who measure the presence or absence of an outcome should be blinded to the cohort to which the subject belongs.

The final part of the methods section must contain a description of what statistical analyses were used and why. Moreover, the authors must demonstrate that they have calculated a sample size appropriate for detecting clinically significant differences.

### The results

In reporting the results the authors must describe the characteristics of the members of each cohort at the onset of the study — a table is usually the best way. They also must account at the end of the study for all the members. If more patients leave one cohort than leave another the authors will need to describe their characteristics and, if possible, any

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differences in the exposures or risk factors under study. If assessing exposure or risk the authors should present their data in terms of relative risk, with appropriate confidence limits.

## The discussion

As in other reports of biomedical studies the authors must justify their interpretation of their data and consider other possible interpretations. But most important they must recognize that all studies are

vulnerable to bias and therefore must describe and discuss the potential biases particular to their study. The authors should pay particular attention to potentially confounding biases. Precaution against potential bias is the responsibility of the investigator, not the reader.

## Reference

1. Squires BP, Elmslie TJ: Reports of case-control studies: What editors want from authors and peer reviewers. *Can Med Assoc J* 1990; 143: 17-18

## Conferences

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**Sept. 13-15, 1990:** New Brunswick Medical Society Annual General Meeting  
Hotel Beauséjour, Moncton  
Ms. Judy Orem, annual general meeting coordinator, New Brunswick Medical Society, 176 York St., Fredericton, NB E3B 3N8; (506) 458-8860

**Sept. 13-15, 1990:** Ontario Medical Association and Canadian Anaesthetists' Society Annual Fall Meeting  
Niagara Falls, Ont.  
Dr. F. Halliday, OMA/CAS Annual Fall Meeting, c/o Greater Niagara General Hospital, PO Box 1018, Niagara Falls, Ont. L2E 6X2; (416) 358-0171, ext. 474

**Sept. 14-16, 1990:** Canadian Hospital Association 7th Annual Invitational Seminar on Health Care Directives  
Millcroft Inn, Alton, Ont.  
Conferences, Canadian Hospital Association, 100-17 York St., Ottawa, Ont. K1N 9J6; (613) 238-8005, FAX (613) 238-6924

**Sept. 14-17, 1990:** Royal College of Physicians and Surgeons of Canada Annual Meeting (held in conjunction with the Annual Meeting of the Canadian Pediatric Society and Canadian Society for Clinical Investigation)  
Metro Toronto Convention Centre  
Anna Lee Chabot, coordinator, Royal College of Physicians and Surgeons of Canada, 74 Stanley St., Ottawa, Ont. K1M 1P4; (613) 746-8177, FAX (613) 746-8833

**Sept. 14-17, 1990:** 67th Annual Meeting of the Canadian Paediatric Society (held in conjunction with the Annual Meeting of the Royal College of Physicians and Surgeons of Canada)  
Metro Toronto Convention Centre  
Dr. Victor Marchessault, executive vice-president, Canadian Paediatric Society, 401 Smyth Rd., Ottawa, Ont. K1H 8L1; (613) 737-2728

**Sept. 15-23, 1990:** British Medical Association Annual Scientific Meeting  
Edinburgh  
Meetings Department, PO Box 8650, Ottawa, Ont. K1G 0G8; 1-800-267-9703, FAX (613) 731-9013

**Sept. 16-18, 1990:** Change, Challenge, Choice: Nursing Administration in the '90s  
Westin Harbour Castle, Toronto  
Louis Charlebois, director, Executive Development, Canadian College of Health Service Executives, 201-17 York St., Ottawa, Ont. K1N 5S7; (613) 235-7218, FAX (613) 238-6924

**Le 20-22 sept. 1990:** Le septième congrès scientifique de l'Association des médecins d'urgence du Québec (AMUQ)  
L'hôtel Bonaventure, Montréal  
Dr F. Bertrand, directeur, Septième congrès scientifique, AMUQ, 208 Niagara, Kirkland, PQ H9J 3W7

**Sept. 21-23, 1990:** Dermatology '90: Therapeutic Update  
New World Harbourside, Vancouver  
Dermatology '90, 204-402 W Pender St., Vancouver, BC V6B 1T6; (604) 669-7175, FAX (604) 669-7083

**Sept. 22-28, 1990:** 23rd International Congress on Occupational Health: Sharing Solutions  
Montreal Convention Centre  
Secretariat, 23rd International Congress on Occupational Health, 2-58 de Brésolas St., Montreal, PQ H2Y 1V5; (514) 499-9835, FAX (514) 288-4627

**Sept. 27-28, 1990:** 3rd Annual Urological Conference — Urological Excellence: Ready, Set, Flow!  
Toronto Airport Hilton Hotel  
Conference and Seminar Services, Humber College, 205 Humber College Blvd., Etobicoke, Ont. M9W 5L7; (416) 675-5077, FAX (416) 675-0135

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