Dr. Harold Drutz completed his undergraduate degree in Medicine from the University of Toronto in 1969. His postgraduate training included residency in Urology, General Surgery and Obstetrics and Gynecology and he obtained his fellowship in Obstetrics and Gynecology in 1974. Postgraduate training was carried on in Sweden, The Netherlands, Scotland, Ethiopia, United States. Currently, Dr. Drutz is Professor of Obstetrics and Gynecology, and Head of the Division of Urogynecology and Reconstructive Surgery (URPS) in the Department of Obstetrics and Gynecology at the University of Toronto. Dr. Drutz's main areas of clinical research are in reconstructive pelvic surgery, pharmacology of the lower urinary tract, periurethral injections, urogenital aging and the role of thyroid function in lower urinary tract disorders. He is currently co-editing a textbook on “Urogynecology and Reconstructive Pelvic Surgery” for Springer-Verlag.

SCOPE OF THE CANADIAN PROBLEM

In Canada, Urinary Incontinence (UI) is a significant medical and social problem which can be devastating to a woman’s physical, social and emotional well being. As in other developed countries our population is aging. In 1993, 11.8 per cent of all Canadians were over age 65; by the year 2011, the proportion of this age group will be 14.0 per cent; by 2031, it will be 21.7 per cent (1).

It is estimated that between 1.5 to 2.0 million Canadians (out of a population of just over 30 million) suffer from UI, yet only 1:12 will seek medical attention for this problem. UI is now the commonest cause of admission to long-term institutionalized centers in the United States and Canada.

In Canada, we now spend over 1.5 billion dollars annually on this health care problem. At the Baycrest Geriatric Center (BGC) in Toronto, where we have a urogynecology branch of the unit at Mount Sinai Hospital (MSH), recent budget figures indicate that the hospital spends $320,000 (Canadian) annually on adult diapers (2).

ORGANIZATIONS

A) INFORMATION

1) THE CANADIAN CONTINENCE FOUNDATION (TCCF)

TCCF (formerly the Canadian Simon Foundation) is a non-profit orga-
nization with involvement of government, industry, consumers and health care providers devoted to the promotion of information for the consumer about the availability of care for individuals who suffer with Incontinence problems. TCCF sponsors a National Incontinence Awareness Week during which the annual meeting is held.

B) SCIENTIFIC

1) THE CANADIAN-URODYNAMIC-PROFESSIONALS (CAN-U-P) SOCIETY

This society was founded in 1979 and consists of Urologists, Gynecologists (Urogynecologists), Geriatrists, Physiotherapists and Nurse Specialists all of whom have a special interest in UI. The Society has a clinical scientific meeting every two years and its members actively support TCCF.

2) THE CANADIAN SOCIETY OF UROGYNECOLOGY AND RECONSTRUCTIVE PELVIC SURGERY (CSURPS)

This newly formed (1999) society is a special interest group within the Society of Obstetricians and Gynecologists of Canada (SOGC).

The members are predominantly urogynecologists and general gynecologists with a special interest in UI and pelvic floor disorders in women. Other health care providers (family physicians, nurse practitioners) who are affiliated with the SOGC are active participants. GSURPS has an annual scientific meeting in conjunction with the CSURPS annual meeting.
with the annual clinical meeting of the SOGC and its members actively support TCCF.

HEALTH CARE PROVIDERS

2) FAMILY PHYSICIANS

Primary care physicians are in the best position to uncover the condition of incontinence and initiate first-line therapy. However in a mailed questionnaire to 1500 general practitioners in Ontario, Canada, we had a response rate of only 18%. Fifty five per cent of responding physicians see more than 1 patient per week with UI.

85% of physicians underestimated the prevalence of incontinence in the female population aged 25-64; 29% do not routinely ask about incontinence. In those patients complaining of UI, 71% of physicians demonstrate incontinence. 70% refer on to local urologists and 58% to local gynecologists (3).

It was concluded that there is room for improved education of primary care physicians regarding the health care problem of female urinary incontinence.

3) UROLOGISTS

Most general urologists manage female patients with UI both medically and surgically. In some academic centres certain urologists have developed a particular interest in what is called Female Urology and Urodynamics.

OPERATORI SANITARI

2) MEDICI DI FAMIGLIA

I medici di base sono nella posizione migliore per diagnosticare la condizione di incontinenza e per iniziare una prima terapia. Ad un questionario spedito a 1.500 medici generali nell’Ontario, Canada, abbiamo avuto una percentuale di risposte solamente del 18%.

Il cinquantacinque per cento dei medici che hanno risposto visitano alla settimana più di un paziente che presenta IU.

L’85% dei medici sottovaluta la prevalenza dell’incontinenza nella popolazione femminile di età compresa tra i 25 e i 64 anni; il 29% non fa di solito domande sull’incontinenza. Nei pazienti che lamentano IU, il 71% dei medici conferma all’esame clinico l’incontinenza. Il 70% indirizza i pazienti ad un urologo locale e il 58% ad un ginecologo.

In conclusione esiste lo spazio per una migliore formazione dei medici di base sul problema sanitario dell’incontinenza urinaria femminile.

3) UROLOGI

Molti urologi generali trattano le pazienti con IU sia medicalmente che chirurgicamente. In alcuni centri accademici alcuni urologi hanno sviluppato un particolare interesse per ciò che viene chiamata Urologia femminile e Urodinamica.
C) GYNECOLOGISTS/UROGYNECOLOGISTS

Most general gynecologists manage female patients with UI and other pelvic floor disorders. Formally trained physicians in Urogynecology and Reconstructive Pelvic Surgery (URPS) now practice across the entire country. In 1992 the SOGC formed an official subcommittee on Urogynecology to create guidelines for clinical-practice and training in URPS at both the undergraduate and graduate levels (4), and to promote continuing medical education (CME). Nearly all Canadian medical schools with academic departments of Obstetrics and Gynecology have teaching staff with special training in URPS. We (5) mailed a confidential survey to all 256 residents registered in Canadian residency training programmes (n=16). The response rate was 55 per cent. There was an equal response from those in all four years of training. Urogynecology was a required rotation for 23.6 per cent, and 17.8 per cent had completed a rotation in it at the time of the survey. By their final year of training, 17 per cent had not received formal instruction on the taking of history for urinary incontinence. Forty per cent had been taught how to interpret a cystometrogram. By their final year, residents had acted as the primary surgeon in an average of 36 vaginal hysterectomies; range 0-200); 29 anterior repairs (r=1-125); 25 posterior repairs (r=0-125); 7 enterocoele repairs (r=0-48); 10 retropubic suspensions (r=0-30); 1 needle suspension (r=1-10) for stress incontinence.

C) GINECOLOGI/ UROGINECOLOGI

Molti ginecologi generali hanno in cura donne con IU e altri disturbi del pavimento pelvico. Medici addestrati alla Uroginecologia e Chirurgia pelvica ricostruttiva (URPS) esercitano ora in tutta la nazione. Nel 1992 la SOGC ha formato ufficialmente un sotto-comitato di Uroginecologia per creare le linee-guida della pratica clinica e della formazione in URPS, sia per gli studenti che per i laureati, e per promuovere la formazione medica continua (CME). Quasi tutte le scuole medico canadesi con un dipartimento accademico di Ginecologia ed Ostetricia hanno personale insegnante con una formazione specifica in URPS. Abbiamo spedito un questionario confidenziale a tutti i 256 iscritti ai programmi di formazione a tempo pieno canadesi (n=16). La percentuale di risposte è stata del 55%. La risposta è stata ugualmente distribuita tra i quattro anni di formazione. L’uroginecologia era un training richiesto per il 23,6% e il 17,8% ne aveva completato il training al momento del questionario. Nell’anno finale di formazione, il 17% non ha ricevuto un’istruzione formale sul modo di formulare un’anamnesi. Al 40% è stato insegnato come interpretare un cistometrogramma. Nell’ultimo anno, gli specializzandi hanno eseguito “da primo” in media 36 isterectomie vaginali (range 0-200); 29 colporrafie anteriori (r=1-125); 25 colporrafie posteriori (r=0-125); 7 riparazioni dell’enterocele (r=0-48); 10 sospensioni retropubiche (r=0-30); 1 sospensione ad ago (r=1-10) per incontinenza da stress.

Hanno eseguito una o meno inter-
They had performed one or less sling operations for incontinence, fistula repairs, Martius grafts, or urethral diverticulum repairs. It was concluded that there exist deficiencies in the instruction for, and surgical treatment of incontinence and prolapse. Basic vaginal surgery exposure is a relative strength, however, such operations as vault suspensions and fistula repairs should be left to those with additional training as exposure during core clinical training is quite limited. There is significant difference in university programmes, and this disparity will only be corrected by having urogynecology divisions as an essential part of each OB/GYN residency programme.

D) GERIATRISTS

A number of geriatrists working with institutionalized patients have developed an interest in the basic evaluation of incontinent patients (6) and their medical and conservative management. This practice is to be encourage as there are not enough urologists and gyencologist/urogynecologists to handle this patient load. Residents in geriatrics at the BGC have an option of rotating through the Urogynecology Clinic at BGC and MSH.

E) NURSE PRACTITIONERS

Many nurses in Canada have taken specific training in the management of patients with UI and are now involved in government sponsored programs to manage community problems. These nurses are now able to adequately manage issues of incontinence, and they are an important part of the multidisciplinary team treating patients with incontinence and prolapse.
dwelling patients who suffer from this problem.

**F) PHYSIOTHERAPISTS**

There are centres of excellence where physiotherapists have acquired expertise in behaviour modification techniques (Pelvic Floor Exercises, Functional Electrical Stimulation, Biofeedback).

**G) OTHER HEALTH CARE PROVIDERS**

In some centres dedicated psychiatrists and psychologists have developed an interest in evaluating patients with UI and other voiding disorders. Many neurologists have developed not only and interest in UI but also in Chronic Pelvic Pain (CPP). At MSH we have a Pain Unit which specializes in CPP and works collaboratively with the Urogynecology Unit.

**PAYMENT**

The Canada Health Act ensures that all Canadians covered by their Provincial Health Care Plans have access to the investigation of incontinence (basic investigations, simple and sophisticated urodynamic testing, endoscopy), and cover the entire cost of most surgical procedures. Provincial Health Care plans do **not** cover the costs of supportive devices, vaginal cones, bulking agents (Collagen, Teflon, etc.), functional electrical stimulation (FES) or Sacral Nerve Stimulation.

Biofeedback techniques and phys-
Iotherapies are not universally covered and some patients have private insurance that may cover some of these therapies. The costs of new technologies used in some surgical procedures (e.g. Bone Anchors, TVT, etc.) are NOT covered by the Provincial Insurance Plans and have to be taken out of existing hospital budgets. This policy unfortunately impedes the widespread use of these new technologies as there is not direct mechanism to pass these costs onto the consumer or third party payors.

CONCLUSIONS

Canada remains in the forefront of modern medicine in that we have nationally and internationally recognized centres of excellence that provide care for women who suffer from UI and other pelvic floor disorders. We need ongoing dialogue between consumers, health care providers, government and other funding sources to ensure that Canadians have access to state of the art technologies. Some of these new technologies have yet to be proven through well designed randomized control trials that they are not only effective but truly cost effective.

However, as the author has previously published, “We have come a long way, we have only just begun” (7).
Correspondence to:
Harold P. Drutz, MD., FRCS (C)
Professore e Capo Sezione di Uroginecologia
10 North, Mount Sinai Hospital
600 University Avenue
Toronto, Ontario
CANADA, M5G 1X5

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