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TECHNOLOGY ASSESSMENT REPORTS

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The Patient–Doctor Relationship

This document focuses on the scientific evidence presently available on the patient–doctor relationship. As the patient seeks care, the physician represents only one of many relationships that the patient forms, and relationships with physicians and other professional caregivers have a mutual influence on each other. This critical, systematic review is based on approximately 800 studies that were selected according to predetermined quality criteria. Most of the studies were performed in the United States, but several are from Canada, the Netherlands, Great Britain, and Sweden. Most studies involve patients treated in ambulatory care settings.

ETHICAL AND LEGAL ASPECTS

The foundation for the role of the modern physician is not one of inherited authority but one based on knowledge and the ability to communicate with patients. Patients of the future cannot be expected to simply concur with the information they receive from their physicians, but will probably express a preference—and have the right—to participate in medical decisions.

The ancient ethical principles that physicians shall do good, do no harm, be just, and respect patient autonomy and integrity are reflected in healthcare legislation. The principles of doing good and doing no harm are reflected in the demands for appropriate care, the principle of justice is reflected in the demands for equality in care, and the principles of patient autonomy and integrity are reflected in legislation. Hence, the patient–doctor encounter/relationship is placed on a level similar to the quality of care.

Although the relationship between patient and doctor is less than equal, both parties have a common desire to achieve the best possible outcome from care. Here, however, the physician's medical perspective diverges from the patient's personal and social perspective to focus on the traditional goals of diagnosis and effective treatment. If a fruitful relationship is to develop, both parties must be prepared to be flexible in their positions. The doctor must attempt to see the disease from the patient's perspective, and the patient must be helped to understand it from the doctor's perspective.

The ethical principles that serve as a foundation for doctors in creating good relationships with patients are professional attitude, human compassion, and empathy. Professional attitude involves being guided by factors that focus on the patient and not by personal needs and feelings. Human compassion involves letting the patient know that he or she has a value as a person that is absolute and unconditional. This can be demonstrated, for example, through courtesy, introducing oneself, placing oneself on eye level, and giving the patient undivided attention during the encounter. Empathy involves noticing and understanding the patients' feelings and communicating this understanding not only in words but in all actions concerning the patient.

ARE THERE UNIFORM NORMS FOR A GOOD DOCTOR?

Aside from medical expertise, it is difficult to identify characteristics that are absolutely necessary in the physician role. One reason is that the medical profession is extremely multifaceted—some choose a purely theoretical direction while most become clinically active in the field, where patient contact is a key aspect. Medical schools should not limit recruitment to students with appealing personal characteristics, but also recruit good teachers who have the ability to pass on their knowledge to lay people and students alike. The need for medical researchers must also be met.

The few studies that have been completed suggest that clinical skills and the ability to communicate with patients appear to go hand in hand. However, there are no studies showing that good researchers are also good teachers and dedicated clinicians. Since medical education now offers doctors a multitude of areas to choose from, it is probably unwise to use overly narrow admission criteria.

COMMON GROUND IN THE PATIENT–DOCTOR ENCOUNTER

Patients and doctors do not meet on equal terms. Patients are often worried and are seeking help. Generally, they lack detailed knowledge about how the body functions in sickness and health. Hence, doctors usually hold an advantage, which they must be well aware of and which they cannot abuse.

The patient–doctor relationship develops in many different situations in health care. Patients may suffer acute injury, e.g., broken bones or brain concussion, or they may visit the doctor for regular check-ups for a chronic disorder. Some patients seek care for symptoms that are not well defined and that need to be evaluated and diagnosed. Others are treated for a longer period for a known disease. In some cases, treatment focuses on curing disease; in other cases cure is not possible and treatment focuses on relieving severe symptoms.

Individuals who are basically healthy may also have contact with physicians, e.g., for pregnancy and well baby check-ups, to sign insurance forms, and for health check-ups. At times, physicians do not play the role of a caregiver but one of a clinical researcher who asks patients to participate in scientific studies and informs them of the advantages and disadvantages. To meet requests from public authorities or to satisfy legal requirements, physicians may perform examinations or certify sick leave.

The relationship is influenced by these different situations, since the primary role of the physician varies. However, there is common ground in that the patient—the individual—must be received with professionalism, compassion, and empathy. These characteristics cannot be ignored, even if time is limited and the doctor must make quick decisions. The nature of the consultation determines whether the focus is placed on the biomedical or the psychosocial dimensions. Physicians must be prepared to change direction if the position they take does not provide sufficient understanding or result in successful action to address the patient's problems.

WHAT DO PATIENTS WANT FROM DOCTORS?

The answer to the question about what patients want from doctors depends largely on how and where it is asked. Patients often claim to be satisfied with care when they answer questions directly associated with a healthcare contact. Nevertheless, patients are often critical that they receive too little information and have too little time to talk with the doctor. Aside from a true feeling of being satisfied, the answer may also reflect relief over becoming better or reflect a fear of being treated less well if they give critical comments. Expectations also differ by cultures and societies. With reservation for the fact that most studies were not performed in Scandinavia, it appears obvious that most patients want physicians to be involved, knowledgeable, interested in the patient's life situation, and engage the patient in a dialogue about treatment alternatives.

HOW DOES IT LOOK IN PRACTICE?

Many studies include either audio- or video-taped conversations. With few exceptions, studies have focused on physician visits in ambulatory care and mainly patients with nonacute diseases. The physician usually dominates conversation and focuses on strictly medical questions. Younger physicians and female physicians are more open to psychological and social aspects.

DOES THE STYLE OF CONVERSATION MAKE A DIFFERENCE?

Clearly, patients are more satisfied if the doctor encourages them to be active in the conversation, allows time to listen, and attempts to develop a collaborative relationship.

Nevertheless, research cannot yet answer the question of whether such physician behavior influences the course of disease in a positive direction. Some short-term studies suggest this is the case, for example, blood pressure declines in patients with hypertension and blood sugar is more stable in diabetics.

Patients with nonspecific problems often visit family practice and internal medicine clinics, and success in relieving their symptoms is often related to how well the patient and doctor can agree on diagnosis and treatment. Attention to psychosocial relationships during the encounter also increase the probability for improving the state of health. These favorable aspects of the patient–doctor relationship are mainly associated with short-term symptoms. Family practitioners who use a patient-oriented approach to their work and who are restrictive with examinations, consultations, and nonspecific medications have healthier patients who take more responsibility for their care than patients of physicians with other working methods.

A mutual understanding between the doctor and patient leads to patients having a sense of responsibility for their care and participating in it. Poor communication, where the patient's true problems do not receive attention, where psychosocial problems are neglected, or where mutual understanding is not reached, leads to return visits, unnecessary referrals, inaccurate treatment, a lack of compliance, and patient dissatisfaction and resignation.

The patient's psychosocial and personal situation is considered to a higher degree in evaluations and treatment at community health centers and family practice centers than at specialty departments in hospitals. Patients having problems treated by primary care services receive care that is more goal-directed.

IMPORTANCE OF THE PLACEBO EFFECT

Placebo refers to treatment that does not have known biological effects. Nevertheless, placebo treatment can achieve substantial improvement, even in severe physical diseases.

Treatment involving placebo should take place only in research where patients are informed that they are likely to receive placebo. In studies of most diseases, a varying percentage of patients are shown to improve with placebo. In some cases, the improvement may last for a longer period, and therefore can hardly be explained by the patient's belief they had received active treatment. The placebo effect is related to the patient's and doctor's expectations on treatment and to the quality of the patient–doctor relationship. Placebo enhancement can be used as a specific treatment.

PSYCHOTHERAPEUTIC RELATIONSHIP

Psychotherapy is not a form of treatment that physicians generally offer, and is often practiced by professionals other than physicians. The essence of psychotherapy is a patient–therapist relationship, the nature of which has not been thoroughly studied in other clinical contexts. An extensive and unanimous body of research, regardless of the type of psychotherapy studied, shows that the successful psychotherapist is one possessing the characteristics of sincerity, sensitivity, empathy, and humility. Furthermore, it is the patient's perception of the therapy situation, more so than the therapists, that is related to the outcome.

A direct association between formal education in psychotherapy and treatment results has not been identified. In contrast to the research on the communication skills of physicians, no studies have examined the extent to which psychotherapists can develop the personal characteristics that have been identified as essential.

PSYCHOLOGICAL PREPARATION FOR SURGERY

A conversation with a physician or nurse on the eve of surgery—to create a sense of security via information, instructions in postoperative mobilization, and the opportunity to address the patient's concerns—relieves pain and other problems and shortens the postsurgical hospital stay. The more comprehensive the psychological preparation, the better the effect. Since interventions are modest in comparison to the benefits, psychological preparation prior to surgery enhances both quality and cost-effectiveness.

GRIEF AND LOSS

Studies addressing the importance of the relationship in times of grief and the loss of next of kin suggest that the skills of physicians and other caregivers to accept and deal with difficult emotions is often sufficient to help grieving individuals cope with their loss without calling on more extensive intervention from the health services. Obviously, the organization and its routines must leave room for comfort and support, and hold a basic perception where death is viewed as a natural event and not physician failure.

Regardless of the age of the deceased or if a child is stillborn, it is essential for the family to have the opportunity to view the deceased and bid farewell in a peaceful environment.

NOTIFICATION ABOUT LIFE-THREATENING DISEASES

Traditionally, physicians have considered patients incapable of coping with information about severe disease. In the West, and increasingly in other cultures, this paternalistic attitude is being increasingly questioned. Patients expect thorough information about their condition and potential treatment alternatives. In many countries, this expectation is backed up by legislation. Nevertheless, some patients do not want, or cannot cope with, all information.

Usually it is not a matter of all or nothing. Rather, physicians must be sensitive to the patient's ability to handle information. Information may have to be given incrementally,

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and in some cases the patient may maintain the desire not to know. Important or disturbing information should be given during scheduled visits and not via letter or telephone. Doctors should inform patients in a peaceful environment, either with the patient alone or accompanied by someone who the patient trusts.

NOTIFICATION ABOUT MALFORMATION, INJURY, AND SERIOUS ILLNESS IN NEWBORNS

For information to be received appropriately by parents in this situation, it must be given within a framework of a relationship characterized by direct honesty, warmth, compassion, sensitivity, empathy, and acceptance for emotions. The way in which information is given may somewhat neutralize the negative content of the message. Parents of malformed children often perceive a need to develop contact with other parents in the same situation and should be helped with such contacts.

ADDRESSING SEXUAL QUESTIONS

How physicians handle and discuss sexual questions has not been studied in Sweden, but studies from the United States and Great Britain show that many physicians find it difficult to take the initiative to discuss these questions. This applies particularly to female physicians, but also to older male physicians. At the same time, most patients want the physician to take this initiative. Many diseases and treatments may cause sexual problems, but this area usually receives too little attention in medical education. The evidence shows that even moderate educational input can improve the physician's ability to deal with sexual questions.

HELPING PSYCHOSOMATIC PATIENTS

Psychosomatic patients express psychological and social problems through physical symptoms. Many studies show that a large proportion of all physician visits are made by individuals in whom the doctor, despite extensive examination, cannot find a specific physiological reason for the patient's illness. Usually, substantial psychosocial problems are present, but the patient prefers not to recognize these as a possible reason for the physiological symptoms. These patients are the ones who probably experience the most problems in relationships to doctors, and who doctors experience as being difficult patients. Several studies have shown that if the attending physician receives psychological or psychiatric guidance and education, this leads to fewer unnecessary tests and physician visits, but usually not to more satisfied patients.

The group of patients with unexplained physiological symptoms often includes many with undetected anxiety and depression. It is important to diagnose these conditions since specific treatments are often available. Psychotherapy of a cognitive nature can be used to treat conditions that are primarily psychosomatic. This type of treatment requires specially trained therapists and that patients accept psychological therapy.

Considering that these are common problems and that patients have a negative attitude toward psychological therapy, only some of these cases will be treated in psychiatry. We do not know how family practitioners can be best prepared to manage this type of patient, but collaborating with psychologists or psychiatrists can be helpful. Nevertheless, it is essential for physicians to show respect for patients and not dismiss them as faking an illness or falsely believing themselves to be sick.

MEETING POTENTIALLY SUICIDAL PATIENTS

Thoughts about death, or that it would be best to stop living, are relatively common. Likewise, specific thoughts of suicide are not rare. Annually, approximately 200,000 individuals

receive care in Swedish hospitals for self-inflicted injury. Approximately 1,700 individuals commit suicide annually, which is three times the number of traffic fatalities.

Many potentially suicidal patients visit family practice clinics, often their first contact with health services. Since the potentially suicidal patient is somewhat unusual among the clinic's clientele, they may be difficult to identify. Suicidal actions tend to be ambivalent. Hence, suicide can often be prevented. Since the very nature of suicide creates anxiety, there is a tendency among staff to discount suicidal thoughts and underrate the risk. Staff working in inpatient departments often have negative attitudes toward patients who attempt suicide, particularly if they are substance abusers.

If physicians suspect depression or otherwise suspect a patient of considering suicide, they should confront the patient directly. Nothing in the research suggests that such questions would lead to attempted suicide. Generally accepted interview strategies are available. Many patients who have considered suicide reported they were relieved to have a physician confront them with such questions.

A Swedish study found that education of general practitioners that focused on improvement of the patient encounter, greater reliability in diagnosis, more goal-oriented treatment of depressed patients, and improved reliability in assessing suicidal risk led to a lower suicide rate in women during the first year following education. Since the prescription rates for antidepressants increased, it is probable that the reduction in suicide was associated with physician education. Continuing education is required to achieve longer term effects and to identity potentially suicidal males.

SPIRITUAL QUESTIONS

Doctors often face questions concerning the conditions of human existence, e.g., why one becomes ill, disabled, or childless, or the meaning of suffering and life. In Sweden, nearly one-half of the population and medical students believe in life after death. Nevertheless, spiritual questions in the patient–doctor relationship have been studied only to a minor extent.

Physicians should develop thoughtful strategies for addressing the spiritual questions raised by patients. Education concerning the patient–doctor relationship should include spiritual questions.

RELATIONSHIP TO OLDER PATIENTS

An increasing proportion of patients are either elderly or very elderly. Their values and perspectives on the physician's role often differ from those of younger individuals. In Western cultures, the experiences and knowledge of the elderly are often given a low value. Studies have shown that healthcare staff, including physicians, tend to consider even the intellectual, active elderly person incapable. It is not unusual for younger relatives to be present during the physician encounter, and the conversation is frequently directed more toward the relative than toward the patient. Caring for the elderly carries a low status, and aging probably receives too little attention in physician education. The few studies available suggest that psychosocial conditions receive little attention during conversations with elderly patients.

CARE IN THE FINAL PHASE OF LIFE

Physicians often play a limited role as patients reach the final phase of life. Yet medical intervention is essential to relieve pain, respiratory distress, and anxiety, and to improve intestinal and urinary functions. Increasingly, community services are providing more care during the final phase of life. These services often experience a shortage in medical expertise, particularly physician services. Hence, it is important to ensure that patient needs for medical expertise are met.

Advancements in medical technology have made it possible to maintain bodily functions even when the brain is permanently damaged. Studies show that some patients want to discuss the life-sustaining measures that should be taken following, e.g., cardiac arrest or severe stroke. Others are less prepared to discuss such issues and leave these decisions up to the physician. Research findings differ as regards the percentage of patients who want physicians to bring up such issues.

MEDICAL EDUCATION

Traditionally, medical education is based on admitting young students with high grades from upper secondary school. The first 2 to 3 years of medical education have been theoretical, focusing on the basic biomedical sciences. During the subsequent 3 years, students meet patients while serving as residents in different clinical specialties. For several decades, the curricula have offered courses in general patient contact and practical training in physical examination methods. Medical psychology is a subject that has recently appeared in curricula. Here, students are trained in communication skills by conducting patient interviews that are videotaped for later discussion.

Criticism has been growing in the West, claiming that this type of educational model provides insufficient training in patient communication and that it artificially separates theory from practice. In Sweden, for example, it is claimed that experience in working life should also be accorded a value, which has led to the admission of students to medical school at a relatively high age. For several years, it has been possible to enter medical school without having the highest grades. Grades are combined with an extensive interview. At some medical schools, all students are interviewed as part of the admission process, while other schools admit only on the basis of grades.

The study suggests that those admitted on the basis of interview results and suitability criteria performed equally as well in medical school as those who were admitted on grades alone. Those admitted from interviews dropped out less frequently than those admitted on grades alone. Differences in communication skills were not studied.

As a reaction toward traditional medical education, the problem-oriented educational model was developed in Canada in the 1970s. Under this approach, students meet patients early, theory and clinical skills are integrated, and the focus is on active problem solving where teachers serve more as advisors than lecturers. No studies had systematically examined whether this educational model provides physicians with better skills in communicating with patients. The evaluations of this model suggest that students in problem-oriented education are more satisfied with their education than those who attend traditional medical school. This may be due to the fact that they applied for this type of education.

A Canadian study showed that practicing physicians who were educated under the problem-oriented model maintained and improved their skills more than those who had attended traditional medical schools. Even here, the differences may be the result of different personalities seeking different types of education.

Problem-oriented education is well aligned with the concept of evidence-based medicine, and in practice the two educational models overlap to a large extent.

PRACTICING COMMUNICATION SKILLS

Many studies have shown that medical students and licensed physicians can learn more effective communication patterns that impart more medical information and are more satisfying to both the patient and the doctor. Those having the poorest communication skills at the outset improved the most. Training during the latter part of medical education appears to be

more effective, and follow-up found that learned skills appear to have been maintained or developed further. Theoretical education appears to be ineffective, while experienced-based education is successful. Men consistently had lower scores than women.

PHYSICIAN NEEDS FOR SUPPORT AND GUIDANCE

Special research is not necessary to assume that physicians who do not like their work or have many of their own problems find it more difficult to become involved in their patients and maintain good relationships. Hence, it is essential to study how physicians can prevent losing their sense of involvement and how doctors can be helped with personal problems. Many types of support and guidance are available, although the effects have not been studied. Likewise, we do not know whether physicians with physical or psychological problems receive adequate help.

NEED FOR RESEARCH

Despite the extensive body of literature, the patient–doctor relationship is largely unresearched. The differences among countries, cultures, and healthcare systems make it difficult to draw conclusions from the existing research that can be applied to a particular healthcare system.

The consistent division of research on patient–doctor relationships into psychological and educational components is often artificial and unmotivated. Nevertheless, we have used this method of classification in this book. The extensive body of literature on patient education has not been addressed in this book.

Consultation content was studied by examining language components, e.g., how long the doctor and the patient speak, body language, and disagreement. Such research has shown certain baseline factors that are important in the contact between patient and doctor, but to some extent the results are contradictory, determined by culture.

The authors have reached the following conclusions regarding the need for further research:

- It is essential to develop methods to study the association between treatment results, patients' own initiatives, and compliance with prescriptions, as well as the quality of the consultation and how satisfied the patient and doctor are with it.
- Surprisingly, little research has been done on the importance of the patient–doctor relationship in psychiatric care. Patient and family associations have emphasized the importance of the relationship, not least as regards the psychiatric team, since most patients have little contact with an attending physician.
- It would be of interest to study healthcare systems where female physicians are in the majority (e.g., East Germany, Poland, Hungary, and the Czech Republic) and monitor whether these systems will develop differently than the male-dominated systems in the West, now that the change to democracy makes such studies possible.
- The effects of different support and guidance groups for physicians should be assessed.
- The importance of the patient's relationship to other staff groups in health care should be assessed.
- Within the framework of greater emphasis on patient rights, the importance of patient associations and support groups should be reviewed. When the patient is a child, has a severe mental disorder, or has a congenital or acquired intellectual disability, the relationship between the doctor and family becomes more central and should receive greater attention in research.
- The fact that nearly all medical information is now easily accessible by the public has been recognized, but has not been researched as regards the effect on the patient-doctor relationship.
- Results from educational and marketing research should be applied in patient education, including studies on how to improve compliance.

Urinary Incontinence

Urinary incontinence is a widespread health problem, affecting women more frequently than men. Urinary incontinence has a major negative impact on the quality of life and social interaction. Most people with incontinence are otherwise healthy. In older individuals, incontinence is often related to other diseases, e.g., dementia and stroke.

Urinary incontinence receives relatively little attention in healthcare delivery systems, partly because it is not perceived as a well-definable condition and hence is seldom recorded in health statistics. To some extent, urinary incontinence has been a hidden problem.

Urinary incontinence is classified in different ways, i.e., incontinence that is due to or triggered by stress, urge, overflow, or a combination of these factors. Diagnostics have been refined, and along with the opportunities for improved treatment, urinary incontinence has received increasingly more attention. Interest from the mass media has increased awareness about the problem and encouraged more people to seek help. Nevertheless, only 20% to 50% of those with urinary incontinence seek help from health services.

The prevalence of urinary incontinence varies in different studies. Among women who experience incontinence at least once per week, the rate increases from 3% to 5% of women in their 20s to 10% in their 40s, and to 25% in their 80s. The corresponding figures in males are 2% to 3% in their 20s, 7% to 10% in their 70s, and 20% or more in men above age 80.

LITERATURE REVIEW

This report is based on a systematic and critical analysis of the findings from studies published in the international scientific literature. The review relies in part on a report from the United States, which covers assessments of the scientific literature until 1996. The project group cited the findings from the American report but also conducted their own literature search to cover the period since 1996 and to enhance the U.S. report.

Relevant scientific studies were evaluated using a predetermined protocol for grading the strength of the scientific evidence. Some of the key works were reviewed by two different members of the project group. All chapters were thoroughly discussed by the entire project group, and all members were in agreement with the summaries and conclusions. Five external scientific reviewers were asked to comment on the report.

The quality of the scientific literature varies as regards assessment studies of drugs, surgery, and treatment methods involving training. Studies on quality of life among individuals with urinary incontinence and health economic analyses on the subject received particular attention. In both cases, the literature is limited and weak from a scientific prospective.

Each chapter includes a summary where the project group renders a judgment concerning the quality of the scientific evidence underlying each assertion.

This report does not include a literature review addressing the serious but less common reasons for urinary incontinence associated with cancer, neurological disease, or severe injury to the true pelvis. Studies concerning urinary incontinence in children are not included.

RESULTS

Organization of Care for Urinary Incontinence

Studies show that approximately 9% of all women and 3% of all men over the age of 35 years seek treatment for urinary incontinence. This corresponds to somewhat over one-half of all

individuals with incontinence symptoms, or approximately 300,000 individuals in Sweden. However, this means that many do not seek help for the disorder.

Most patients with urinary incontinence receive care through the primary care services. Somewhat over 40% of those women who visit a family practitioner have urinary incontinence. The corresponding figure for men visiting a family practitioner is 10%.

Gynecology and urology departments/clinics provide more specialized services. In Sweden, over 90 special continence clinics are available under various types of organizations. Most do not require a referral and are usually managed by specially trained nurses or urotherapists. Many patients with total urinary incontinence are cared for in special housing situations, in nursing homes, or in departments for long-term care. District nurses, community care nurses for the elderly, and, more recently, specially trained urotherapists often have direct contact with the patients.

Primary care services diagnose patients and provide treatment, mainly using drugs, pelvic floor training, and various types of bladder training. Other primary care interventions include informing patients, providing advice, and testing new medical devices. In some cases, primary care adheres to clinical practice guidelines that include the treatments mentioned above. An assessment of clinical practice guidelines shows that two-thirds of treated women reported a substantial improvement in their condition. In long-term follow-up after 5 years, most women continued to be satisfied, although the need for medical devices increased somewhat compared with 1-year follow-up.

In elderly care settings, urinary incontinence is common in both women and men. It is often associated with other diseases. Elderly individuals usually use some type of medical device for incontinence, mainly absorbent products such as incontinence pads. Several studies have been conducted on older patients who have been treated by various methods, e.g., training programs, drugs, and surgery. These studies suggest that more active treatment interventions can be effective even in elderly patients, who often have multiple problems and diseases.

Quality of Life

Urinary incontinence can influence the quality of life quite negatively and constitute an obstacle toward living a normal life for many individuals. However, there are few scientifically reliable studies on population-based groups addressing how quality of life is influenced and the factors that play the greatest role. The studies available concern small and disease-specific groups. They show that incontinence can lead to decreased initiative, reduced physical work capacity, reduced social contact, and lower self-esteem. Incontinence also leads to psychological problems, which are more pronounced in urge incontinence than in stress incontinence, and which becomes more intense with age.

Treatment

Many studies concerning different types of treatment are reported in the international literature. They address everything from different types of training programs to treatment using drugs and various types of surgery. Most treatments have, to varying extents, shown good results, particularly in the short term. The results from different studies cannot, however, be compared since patient samples vary and descriptions of the conditions and results of treatment have not been standardized. Follow-up time in different studies has also generally been short or varied. The results of studies are often based on the patient's own descriptions, also making comparisons among studies difficult.

Behavioral Therapy and Physical Treatment. Pelvic floor treatment may result in subjective improvement in 60% to 70% of the women with moderate stress incontinence.

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Long-term studies suggest that the effect can be maintained, particularly when supported by ongoing training. Pelvic floor training can also improve conditions in men effected by stress incontinence, e.g., following prostate surgery. A few studies also show results in mixed and urge incontinence. Exercises using a weighted vaginal cone have been shown to enhance the effect of pelvic floor training in some women; however, as an isolated form of treatment it has been insufficiently evaluated.

Bladder training is an effective treatment for urge incontinence. In elderly patients who cannot manage toilet routines themselves, toilet assistance, scheduled toilet habits, and so-called attention training can be effective measures.

Electrostimulation appears to reduce urine leakage in stress incontinence and urge incontinence. Studies, however, show contradictory results, and many patients discontinue treatment.

Studies concerning the effects of, for example, hypnosis, biofeedback, and acupuncture, are of insufficient quality to draw conclusions.

It is unclear whether the effects of pelvic floor training can be enhanced by other methods used simultaneously, or if the effects of bladder training can be enhanced by concurrent drug therapy.

Pharmacological Therapy. Some patients with urge incontinence have good results from treatment with anticholinergics (bladder muscle relaxants). The risks for side effects vary among the various drugs.

To some extent, estrogen treatment appears to offer some improvement in postmenopausal women who have sensory urge incontinence. The results are poorly documented for other types of incontinence. Treatment using other drugs for urge incontinence have not been proven effective.

Drug therapy has little effect on stress incontinence.

Several studies show that placebo, i.e., nonactive substances, yield subjective improvement in 30% to 50% of patients treated. This should be noted when assessing the results of various studies.

The results of long-term drug therapy are poorly studied. The few studies available show that compliance with drug prescriptions is poor.

Drugs may also cause or contribute toward incontinence if patients already have problems, e.g., in emptying their bladder or with urge symptoms. These apply mainly to diuretics and tranquilizers, and drugs with anticholinergic effects.

Surgery. Surgery has been shown to be effective in women with stress incontinence where no other treatment methods have been successful. These patients experience good results with the so-called sling procedure and colposuspension. Anterior vaginal repair and needle bladder neck suspension have shown less favorable long-term results.

New simplified surgical methods such as laparoscopic colposuspension and tension-free vaginal tape (TVT) have been tested and show promising results.

Surgical and recovery time and risks for complications differ for the various procedures. The long-term effects are poorly assessed.

Isolated comparative studies show that surgery can result in successful treatment even in women with mixed incontinence. Nevertheless, there is a risk for continued or more pronounced urge symptoms.

Stress incontinence is rare in men, and surgery is usually not necessary. In severe urinary incontinence, implantation of an artificial urinary sphincter has shown to be effective in some patients. This method can yield good results in women who do not improve with other treatment, but reoperation is common. Limited improvement can be achieved using so-called periurethral injection methods.

Urge incontinence is seldom appropriate for surgical treatment.

Medical Devices

The most common interventions for urinary incontinence involve the use of medical devices such as absorption products. The literature shows there are major deficiencies in knowledge concerning the type of devices that should be used in individual cases.

The percentage of incontinent individuals who use absorbent products has increased over the past 20 years. One of the reasons has been the desire to reduce the use of catheters in caring for the elderly, and catheters have been largely replaced by absorbent products.

Health Economics

There are no economic studies addressing both the cost and effects of various methods for treating urinary incontinence. However, some studies address only the costs of caring for patients with urinary incontinence. The costs related to elder care and medical devices dominate, while the costs for diagnostics and the more active treatment alternatives account for a relatively low percentage of total costs. The costs to society for medical devices alone, mainly incontinence pads, are high and in 1996 exceeded 1 billion SEK in Sweden. The dramatic increase in the number of elderly in coming years is expected to further increase the cost of urinary incontinence.

SBU CONCLUSIONS

- Urinary incontinence is a major health problem. In Sweden, 500,000 individuals suffer from urinary incontinence on a regular basis, but only 300,000 seek treatment. It is essential to study the extent to which the public is knowledgeable about accessibility to treatment methods and the opportunities to receive help. Furthermore, it is essential that information on urinary incontinence is designed to reach the public at large.
- Urinary incontinence can be treated via a range of medical interventions, e.g., various training programs, drugs, surgery, and medical devices such as incontinence pads. Many methods show positive results, but the effects of different treatment methods are poorly studied. The same applies to preventive interventions such as training during and following pregnancy and types of physical exercise for the elderly. There are few studies comparing the various treatment methods. It would be desirable to increase resources in research and assessment.
- Receiving help or treatment for urinary incontinence is of major importance for the quality of life among those affected. In diagnosis and treatment, major attention should be directed at patient's perceptions concerning how incontinence influences their quality of life. Hence, it is important to develop questionnaires for practical clinical use that can measure and assess quality of life.
- Urinary incontinence is a hidden problem, and the number being treated via different medical interventions is unknown. Urinary incontinence should be registered as a separate diagnosis in health statistics so that the actual scope of the problem can be identified and trends can be monitored.
- Primary care plays a key role in the treatment of urinary incontinence. New types of organizations have developed, e.g., special continence clinics and specially designated staff. The report describes many different treatment alternatives, but it is not known which care resources are available within different areas. To offer everyone with appropriate incontinence care, it is essential to identify the resources and organizational structures available within different catchment.
- In the future, primary care will continue to be responsible for the basic treatment of urinary incontinence. Hence, it is essential to commit greater resources to the methods available in this field, e.g., training programs based on clinical practice guidelines. Evidence-based clinical practice guidelines should be more widely disseminated and applied.
- Elderly with disorders such as dementia are often incapable of determining whether the health services are adequately caring for their incontinence problems. It is important for the staff to notice problems and discuss opportunities for treatment with patients and relatives. It is particularly

important for care providers to develop information and continuing education programs on urinary incontinence to complement the information from manufacturers.

- Expenditures for medical devices and costs related to the care of the elderly comprise the greatest share of the cost for urinary incontinence. It is essential, both from humanitarian and economic considerations, to conduct assessment studies that can identify whether active treatment is better for patients and more cost-effective for health care than passive interventions such as routine use of incontinence pads.

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