SUMMARY

During the past few years a number of publications regarding the negative effects of hysterectomy have been published in the professional literature as well as in the lay press. This dissertation is a report of a study on the psychological functioning of women after hysterectomy, performed because of the impression these publications made upon us, and because of the regular confrontation in our clinical practice with patients having problems after hysterectomy.

Based on the literature regarding the experience of women in western countries, in Chapter 1 an outline is presented in order to answer the questions of: (1) How do women experience their genitals and their genital functions; and, (2) What is the influence of gynaecological treatment on this experience. The conclusion is that in everyday life the existence of genitals is ignored. Moreover, communication about genitals and their functions is taboo, although they are important for a woman's emotional life and her experience of identity. It is proposed that, in particular, gynaecological treatment such as hysterectomy may have meaningful negative influences on the emotional life and identity experience of women.

In Chapter 2, a review is given of the indications, prevalence and implications of hysterectomy. The difference in the prevalence of hysterectomy between various countries is remarkable. Moreover, the prevalence of hysterectomy has recently increased considerably in many countries, for example in The Netherlands by 46 percent in the last decade. The indications for the operation have been widened, probably because of the current low postoperative morbidity and mortality. Hysterectomy is now performed more often than in the past for non-emergency complaints or abnormalities such as bleeding abnormalities, myoma uteri, endometriosis, prolaps and intractable abdominal pain. Research on psychological implications of hysterectomy has lagged behind that on the somatic aspects of hysterectomy.

Chapter 3 gives an extensive review of the English, German, and Dutch literature since 1950 on psychological, sexual and physical functioning after hysterectomy. The publications are classified into three groups: (1) file studies; (2) post-treatment studies; and (3) pre-post-treatment studies. The studies in categories 1 and 2, in particular, have many methodological drawbacks. In spite of these drawbacks the by and large alarming findings of these studies were given much attention. The publications in the category of pre-post-treatment studies have fewer methodologically disputable points. Further,
these publications give a more differentiated picture of the psychological well-being of patients after hysterectomy than do the publications in the first two categories. The results of the pre-post-treatment studies show that after operation, as compared with their state before operation, about 10 percent of the patients deteriorate, 10-35 percent improve, whereas a large middle slice does not show any significant changes. Moreover, the results of the pre-post-treatment studies suggest that many of the postoperatively observed psychological problems already existed either manifestly or in latent form before operation. The pre-post-treatment studies are not congruent regarding the association between background variables such as age or gynaecological history, and pre-post-treatment psychological changes, nor regarding sexual changes after hysterectomy, probably because of the operationalizations used. We therefore concluded that further research requires more reliable and valid operationalizations of terms like psychological dysfunctioning, partner-relationship, sexual functioning, and femininity.

Chapter 4 is a report of a pilot study on the psychological functioning of patients at around the time of hysterectomy. The results of this study suggest that many hysterectomy patients are "problem patients" with psychological as well as physical complaints.

The sex-role theory was chosen as the background theory of the study. In Chapter 5, an interlude, this theory is concisely described. The chapter offers a synopsis of the origin of gender-bound behaviour, of gender identity, and of self as a process of social learning. The relationship between gender-bound behaviour, gender-role stereotypes, self-experience, and sex roles is discussed. Moreover, attention is paid to changes from one phase of life to another, with special attention being given to middle age. Based on the foregoing theoretical considerations, the chapter ends up with some questions about possible influences of hysterectomy on specific female aspects of patients' body experience and identity.

Chapter 6 gives an account of the method used by the Groningen hysterectomy project. Research questions and hypotheses were focused on (1) the measurement of changes after hysterectomy (the pre-postoperative course) in the following dependent variables: psychological and physical well-being, partner-relationship, sexuality, social contacts, and female identity. Moreover, the research questions and hypotheses were used to analyse possible correlations between the pre-postoperative course of the dependent variables and background variables such as age, number of children, duration of preoperative complaints or symptoms, and operation indications. The research design
was a pre-post-treatment design, with measurements taken one month before operation, and six and twelve months after operation. The sample comprised three groups:

Group 1: abdominal and vaginal hysterectomy (N = 151);

Group 2: hysterectomy combined with colporrhaphia anterior and posterior (N = 56);

Group 3: colporrhaphia anterior and posterior or urethra suspension operation (N = 27).

Only patients without evidence of cancer were accepted in the study. Moreover, the operation must have been the first major gynaecological surgery which the patient had ever undergone. Seventy-five percent of the patients who were originally invited to participate in the study eventually completed all measurements. Measurements were performed by means of psychological questionnaires. The study took place in the outpatients clinics of the University Hospital and the Roman Catholic Hospital, both in the city of Groningen (The Netherlands), from June, 1978 until October, 1982.

Chapter 7 reports the results of a reliability study of the scales used. The scales appeared to be acceptable for research purposes. Furthermore, the results of an additional psychometric study on the scales Groninger Androgynie Schaal (GRAS) and Schaal voor Rolbeleving (SRE), and an account for the condensation of the dependent variables in view of the statistical analyses are reported.

Chapter 8 reports the results of the main study. In the first part of the analysis of the results - the comparison of the three groups together - no significant differences were found between the three groups concerning the pre-postoperative course of the dependent variables psychological and physical well-being, partner-relationship, sexuality, social contacts, and female identity (= gender-role experiences, self-definition of femininity/masculinity, meaning of the genitals and their functions for the feelings of femininity).

In the second part of the analysis of the results - the analysis within each group separately of the pre-postoperative course of the dependent variables - significant differences were found in Group 1 but not in Groups 2 and 3. Patients in Group 1, who underwent a hysterectomy only, improved in psychological and physical well-being six months and one year after operation, as compared with their state before operation. Likewise, six months and one year after operation these patients were more contented with the sexual relationship with their partners and had fewer (bodily-experienced) aspects of sexual problems such as aversion, vaginism, dyspareunia, or anorgasmia than before.
operation. Within Group 1, a number of changes were also found concerning female identity. Six months after operation, these patients defined themselves as less masculine than either before or one year after operation. Likewise, six months and one year after hysterectomy, they perceived their tasks as homemaker, mother, and partner as less important and pleasant than before operation. Furthermore, premenopausal women in Groups 1 and 2, who through hysterectomy lost their ability to menstruate, regarded their monthly bleeding as less important for their female identity one year after operation than preoperatively.

The third part of the analysis of the results consisted of a correlational study within Group 1 of a possible relationship between the pre-postoperative course of the dependent variables and various categories of background variables. This analysis revealed that the expectation that women with a more traditional opinion about female identity would experience a greater increase of postoperative problems was generally not confirmed. The only finding confirming this expectation was that women who preoperatively regarded their role as homemaker, mother, and partner as more important experienced an increase of discontentedness with the sexual relationship with their partners after operation.

Two of what in literature are called "risk factors" turned out to be significantly correlated with a postoperative increase of problem behaviour: (1) relational problems in the history were significantly correlated with an increased discontentedness with the partner-relationship, and (2) the absence of histological pathology in the operated material was significantly correlated with a decrease in psychological and physical well-being. Various other so-called "risk factors" appeared to be significantly correlated with a decrease instead of an increase of problem behaviour after operation. The most remarkable of these unexpected correlations were those between a younger age at the time of operation and an increase of psychological and physical well-being, and between a younger age at the time of operation and a decrease of the bodily experienced aspects of sexual problems.

Analysis of the correlations between obstetrical and gynaecological variables on the one hand and psychological changes after operation on the other hand showed that women with a history of induced or spontaneous abortions were less contented with their partner-relationship after operation than other women. Moreover, women with a higher prevalence of menstrual problems in their histories had significantly fewer bodily experienced aspects of sexual problems after operation.
In the category of biographical variables, one significant correlation was found. Women with a higher education experienced an increase of bodily experienced aspects of sexual problems after operation significantly more often than women with a lower education.

In the categories of operation indications and operation variables, removal of both ovaries was found to be significantly correlated with a decrease of psychological and physical well-being. Women with micro-invasive carcinoma appeared to have an increased number of social contacts after operation. The remaining four significantly correlating variables within these two categories were all related to changes in the bodily-experienced aspects of sexual problems. Duration of complaints or symptoms and the indication pain were both correlated with a decrease, and level of Pap score and the indication of premalignant proliferative abnormality were both correlated with an increase of bodily experienced aspects of sexual problems.

The results are discussed at the end of Chapter 8.

The results may be summarized as follows:

1. The patients in this study who had undergone a hysterectomy (Group 1), after the operation, in general, improved in their psychological and physical well-being, were more contented with the sexual relationship with their partners and had less bodily experienced aspects of sexual problems.

2. Most of the patients in this study (Group 1), felt by and large that their sense of femininity was not decreased after hysterectomy.

3. In this study, the following appeared to be risk factors for an increase of psychological problems after hysterectomy (Group 1):
   - a higher age ( > 40 yrs);
   - discontentedness with number of children (too few);
   - a history of induced abortion;
   - a history of spontaneous abortion;
   - the absence of histological pathology in the operated material;
   - removal of both ovaries;
   - operation for a premalignant abnormality.

4. The results of this study generate the suspicion that women who are submitted to hysterectomy combined with colporrhaphia (Group 2) seem to be more at risk for an increase of psychological problems after operation than women who undergo a hysterectomy only (Group 1).

In Chapter 9 the results of the present study are related to the background of the introductory chapters (Chapters 1-5). Methodological advantages and drawbacks, and the restrictions of the operationalizations used are
Furthermore, it is evident that the question regarding the patients' psychological functioning after hysterectomy needs to be differentiated into a number of aspects: (1) intrapsychic functioning; (2) partner-relationship; (3) sexual relationship with the partner; (4) bodily experienced aspects of sexual problems; and (5) social contacts. Also, in answering the question, a differentiation of patients should be made according to psychological, social, and obstetric/gynaecological factors. The results of the present study and of recent investigations by others indicate that, in general, non-cancer hysterectomy has less dramatic psychological consequences than earlier studies have indicated. However, it must be strongly emphasized that these results are found in studies which have only included patients with a clear indication for surgery, based on non-oncological gynaecologic pathology, and that thus these results may not be seen as favoring prophylactic hysterectomy.

The chapter ends with recommendations for further research.