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**SEXUAL FUNCTIONS
IN *W*OMEN AND
THEIR *D*ISTURBANCES**

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Sexual Functions in Women and Their Disturbances

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Sexual Functions in Women and Their Disturbances

The aim of this chapter is to present the interaction of physiological and psychological factors in the sexual function of women. One cannot discuss the sexual function of women without considering that “the mind-body problem looks different in the light of this century’s thought and knowledge—of developmental processes, of physiology and psychology” (Greenfield & Lewis p. viii). Although the following presentation is based on the empirical theory of psychosexual development of the personality, one cannot give a comprehensive overview of the interacting physiological and psychological factors and the modifying cultural influences without beginning with the basic theory of psychoanalysis, the instinct theory.

Theory of the Sexual Instinct

In Freud’s time the concept of instinct did not need explanation, it was self-explanatory. It was based on the thesis that what is universal is self-evident truth for those who perceive the lawfulness of nature. Such self-evident, universal experience is conceptualized in “the instinct of self-preservation” and in “the instinct of preservation of the species.” Freud equated the former with “ego instincts,” the latter with “sexual instincts.” In his search for universal explanations of psychic conflicts, he assumed that the psychic representations of these biological tendencies are energized by forces

that are in conflict with each other.

This hypothesis was useful in explaining behavior at a time when vigorous control and repression of sexuality was the cornerstone of childrearing and morals. Soon, however, Freud discovered that psychic development, the maturation of the ego, occurs in interaction with libido processes and that sexuality itself is dominated by tendencies belonging to ego instincts. Psychoanalysis revealed the intricate interplay of these forces, not as opponents, but as partners in living.

Instinct, as Freud conceived of it, is “a concept on the frontier between the mental and the somatic” (p. 132). In the same paper he defines instinct according to its source, aim, object, and impetus, thus formulating the concept of drive. Instincts are not accessible to experience; only their effect on behavior can be observed. Drives, in contrast, are energy structures that, by responding to need, activate physiological processes to eliminate the need, thus securing survival. Freud conceived of the mental representations of the processes induced by drives as derivatives of instincts. Instincts, drives, and their mental representations are intrinsically interwoven processes. The instinct theory, based on the axiom that the mind originates in and is always dependent on the body, is the foothold of psychoanalysis among the natural sciences. Psychoanalysis as an empirical psychology arrived at its conclusions from observations of adults and children; this led, almost paradoxically, to the

concept of pregenital sexuality.

Viewed from the point of view of biology, the term “pregenital sexuality” refers to manifestations of those innate, autonomous, self- differentiating patterns that evolve in any organism in the process of maturation. It was Freud’s genius that he deduced from behavioral manifestations, from dreams, fantasies, and symptoms of adults that which could be observed in children. In these he and Abraham recognized the sequence of the evolutionary processes that are repeated in the maturation of the human embryo. He also envisioned that the mind receives its energy, at least partially, from the source that in time would supply the drive for procreation.

The “libido theory,” the genetic theory of personality development, although it originated in the instinct theory, did not deal with sexuality and its function in procreation. However, the feedback cycle of psychoanalytic discoveries is demonstrated in the method used in the investigation of the sexual cycle of woman. Without the theory and technique of dream interpretation, without the aim- directed analyses of the multiple motivations of psychic events, it would not have been possible to establish the correlations between phases of the gonadal hormone cycle and psychodynamic tendencies.

From the point of view of general biology, instincts are regulatory

principles that, functioning automatically, secure the survival of the organism. Cannon defined instincts as “coordinators of internal regulatory systems which maintain adaptive stabilization.” The instinctual processes that serve the homeostatic regulatory functions of the organism are the vital, primary instincts. They serve the regulation of breathing, water balance, food intake, elimination, and maintenance of tissue substance. This sequence is indicative of the difference in the urgency of the need that the instinct represents; it shows the physiological time interval between the need and its gratification.

The sexual instincts are secondary; they are in the service of procreation. Intake from the outer world seems to play no role in this instinct; sexual deprivation seems to be significant primarily as a psychological rather than a physiological deprivation. Since sexual instincts do not serve metabolic needs, the lengthening intervals between need and gratification allow for complex psychic elaborations and distortions.

Kubie called attention to a seemingly neglected fact concerning primary instincts. “When instincts are viewed as serving the body by effecting the necessary interchange of substances with the outer world, the organ and the function around which all psychological representations focus must be the appropriate aperture” (p. 3). This would have been a good conceptualization of the insight that Freud and Abraham must have had when they considered the organ of intake, the mouth, and the organs of elimination, the anus and

the urethra, the origins of the instinctual development during infancy.

The symbolic representations of primary instinctual functions center around the apertures of organs that serve primary instincts. The significance of this hypothesis cannot be overestimated regarding the genetic theory of personality development. It is even more important as a link in the unity of psyche and soma, since it indicates the way by which tensions originating on the level of psychological experience (whether conscious or unconscious) are converted into somatic processes. In the context of this study, however, the meaning is that it supports the method and the result of the investigation of the sexual cycle. It is gratifying to realize that the “apertural hypothesis” puts into the frame and language of biology the same idea that Franz Alexander expressed in his vector concept and used for 30 years as the basis for his psychosomatic research. Alexander’s hypothesis means that emotions deprived of their ideational content are expressions of one or more fundamental directions that characterize biological processes. The vector qualities expressed in the psychodynamic tendencies of intaking, retaining, and eliminating are psychic representations of instinctual processes and their related apertures. This expresses in a nutshell the application of the psychoanalytic method of interpretation in the investigation of the sexual cycle.

In the investigation of the sexual cycle the recorded psychoanalytic

material was analyzed; the motivations of dreams, fantasies, and behavior were reduced to the dominant psychodynamic tendency; from this the phase of the hormonal cycle was predicted. This prediction was compared with the independently established diagnosis of the state of the gonadal cycle based on the basal body temperature and the Papinacolou smear of the vaginal mucosa. The frequency of the correlations showed that the psychodynamic tendencies in correlation with low hormonal phases of the cycle are expressed by “apertural,” pregenital motivations; at the peak of the hormonal cycle they are integrated on the genital level as actively receptive, heterosexual tendency. The biochemical component and the related psychodynamic tendency represent a unit that might be taken as the core of the sexual instinct, far distant, of course, from the complexity of those processes that account for sexual behavior.

What is sexuality? Sexuality is the complex manifestation of the sum total of the species- specific processes necessary for the survival of the species. These can be divided into two groups: in one belong those behavior patterns that bring about mating and conception, in the other belong the physiological processes of gestation, parturition, and the care of the offspring. To which group does the sexual cycle belong? In women the sexual cycle repeats monthly the developmental pattern of the pre- procreative personality, but ovulation is a *sine qua non* of procreative sexuality. The “preparatory act”—coitus—is, however, relatively independent of the

procreative goal of sexuality in the human female. The species is “free from estrus.”

Beach defines estrus as “the physiological condition of a female at the time when she can become pregnant as a result of copulation,” and he adds, “Some authors differentiate behavioral from physiological estrus, using the former term to cover all periods in which the female will copulate, even though she may not be susceptible to impregnation” (p. 273). The manifestation of such “behavioral estrus” indicates that the freedom from estrus as an exact differentiating quality of human from infrahuman mammals is not borne out by observations.^[1]

Investigation of the sexual cycle showed that the traces of estrus can be discovered by psychoanalysis; there is a psychodynamic peak of the hormonal cycle that occurs at ovulation. The investigation revealed also that the sexual instinct is rooted in the primary instincts that maintain the homeostasis of the organism and secure its growth and maturation so that the secondary sexual instinct can come to the fore and preserve the species.

Beyond the universal characteristics of the sexual instinct, most significant for man is its plasticity. Having become independent of the limitations of estrus, from the obligation to serve the survival of the species, the factors that promote that basic evolutionary fact continue to interact with

intraorganismic and environmental conditions and increase the gap between sexual instinct and behavior. Molded by psychological processes during the long time lag between infancy and maturity, by the network of instinctual derivatives, the secondary and tertiary elaboration of the instinct broke the boundaries of sexuality. No instinctual process is governed by the body's biochemistry alone; even respiration may become the nucleus of a complex psychological superstructure. In regard to the sexual instinct the process appears reversed. The body's physiological need is secondary; the activities of sexual behavior seem to be stimulated by psychological processes. Whether they are perceptual, as in visual impression, or intrapsychic motivations, it is generally known that the whole gamut of emotions, from love to hate, from tenderness to brutality, from happiness to sorrow, may find release, comfort, and consolation through sexual activity.

What is that which we call sexual drive in men and women? The answer is not simple since the drive is not energized by the sexual instinct alone. Sexual drive can be experienced; as a phenomenon it can be described in men more easily than in women. Freud defined the difference by the basic direction of the drive: active in the male and passive in the female. It is assumed that sexual energy, its appetitive strength and the intensity of its "consummatory behavior," to use the ethologist's term, are constitutionally given, innate characteristics molded by ontogenic development.

What role, if any, do hormones play? According to Beach, “Hormones induce changes in the nervous system which affect those systems that coordinate arousal and mating behavior” (p. 270). Although in many vertebrate species, courtship and mating activities are under hormonal control, this does not hold true with the same stringency for infrahuman primates. In regard to man, history as well as current anthropological and cultural changes screen the hormonal effects from the physiology of the procreative function. But arousal and mating behavior is preparatory to achieving the aim of the sexual instinct. Seeking the mate seems superficial, quasi the end of the chain of hormonal feedback circuits. The master gland, the hypophysis, controls the function of the pituitary gland. In women the pituitary produces the follicle-stimulating hormone (FSH) and the luteinizing hormone (LH) that maintain the cyclical changes of the ovarian hormones, estrogen and progesterone. Although the human species is free from the limitations of estrus regarding sexual behavior, the chain of hormonal reactions maintain the survival of the species, the aim of the sexual instinct.

The Organization of the Propagative Drive

There is one biological motivational system for the survival of the species divided between the sexes. The sexual drive is organized differently in the male and female in order to serve a specific function in procreation. The propagative function of the male under the control of one gonadal hormone,

androgen, is discharged in one act, motivated by a compelling urge for ejaculation that may or may not have the consequence of inseminating (impregnating) the heterosexual mate. Female physiology is under the control of two alternating gonadal hormones: the follicular ripening hormone (FSH), estrogen, which brings about the maturation of the ovum, and the hormone of the corpus luteum (LH), lutein or progesterone, which prepares the uterus for nidation and maintains the pregnancy if impregnation occurs.

The psychoanalytic concept of sexual maturity is based on the organization of male sexuality. The term “genital primacy” refers to a drive organization that is consummated in heterosexual coitus, climaxing in orgasm. Female sexuality does not fit into this model since heterosexual intercourse, from the point of view of reproduction, is only a preparatory act. Pregnancy and lactation constitute the completion of the propagative cycle. Yet the drive organization that motivates pregnancy and lactation is not genital in the same sense as mating behavior.

The phasic nature of the female procreative physiology exposes the drive organization to investigation. The sexual cycle in monthly repetition of the correlated hormonal and psychological processes reveals the instinctual links between pregenital development and procreative physiology. It demonstrates that the primary homeostatic instincts that motivate growth and development prepare the evolution of mature sexuality. Ovulation and its

psychodynamic superstructure disclose that motherhood originates in instincts; thus we may speak of the “mother instinct” in scientific terms.

Developmental Factors and Processes

The sex of the individual is determined at the time fertilization of the egg takes place, through the chromosomal makeup of the gametes (the ovum and the sperm nucleus). The embryo is thus endowed with the potentiality to develop toward one sex. It was generally assumed that the structural differentiation stemmed from an undifferentiated condition. New observations contradict this assumption and demonstrate an initial stage of femaleness in every embryo, the duration of which differs according to the species. In the human embryo it lasts five to six weeks. Then the influence of the sex genes begins to be exerted. The primordial testes begin to produce androgens that induce the transformation of the female genital anlage into the male growth pattern. This inductor theory of primary sexual differentiation has been developed during the last two decades.^[2]

It is beyond the scope of this chapter to give a summary of observations that demonstrate that sexual dimorphism is complete only in the area of procreative physiology. Experiments show that an abundance of opposite sex hormones in the fetal stage affect each sex, influencing development toward the potential for behavioral manifestations characteristic of the opposite sex. In the neuromuscular and psychic structures of both sexes, there remain rudimentary patterns of response and activity characteristic of the other sex. The biological anchorage of bisexuality, however, has not yet been safely

established.

In the language of psychoanalysis the term “bisexuality” refers to a specific disposition to certain psychological reactions to environmental influences that exert control over the development of the personality. Our concept of bisexuality adds dimensions of psychology and social influence that broaden the understanding of human sexuality.

Infants of both sexes introject memory traces of responses to both parents. The complex “learning” during the oral phase occurs primarily through identification with the mother in boys and girls alike. This implies the basic assumption that children of both sexes have a biological predisposition to develop empathic responsiveness to individuals not only of their own but also of the opposite sex; without this, communication between the sexes would not be possible. Such communication is a prerequisite for establishing a relationship between the sexes, be it “love” or just “sex.”

As far as our present knowledge goes, hormones play no discernible role in the psychic manifestations of pregenital development. Children of both sexes excrete in their urine both androgenic and estrogenic hormones. These remain on a low oscillating level until the age of six to eleven years when there is a fairly sharp increase in the hormone production in both sexes. There are reports on the excretion of estrogenic and androgenic hormones at

the age of two to three years, but no increasing hormone production was found in connection with the oedipal phase. Jones found as early as 1927 that in the preoedipal “phallic” phase girls as well as boys might have the tendency to identify with the opposite sex as a defense against heterosexual impulses. In consequence the psychosexual development remains fixated in the phallic pregenital level of organization, motivating penis envy in girls and castration anxiety in boys. This accounts for the manifestations of bisexuality, which complicate the motivational system of the oedipal phase, with its ambivalent object relationship toward both parents. During the latency period the personality of the child enlarges its field of action externally and stabilizes its organization internally. One may speculate whether the extragonadal steroid hormones, estrogens and androgens (in synergy with corticosteroids), have some influence on the self-activation that characterizes the normal latency period.

Puberty is induced by the function of the anterior lobe of the pituitary gland, which secretes a gonadotrophic hormone. This stimulates the ovaries to produce estrogenic hormones and to promote the growth of the ovarian follicles. At about the age of 10 to 11 years girls show a marked rise in estrogen production but not in androgenic substances. The estrogenic hormone is the “hormone of preparation.” Produced from childhood on, at the time of early puberty its function is to stimulate the growth of the secondary sex characteristics and the genital organs. Estrogenic hormone levels

continue to increase and later assume a cyclic variation as a consequence of the rhythmic ovarian activity that is brought about by ovulation. Estrogens thus prepare the uterus and maintain its readiness for the changes that will be imposed upon it by the corpus luteum, which produces progesterone, the "hormone of maturation."

Menstruation is a central event in the girl's puberty, but not an unmistakable sign of her sexual maturity. Menstruation in the human female and also in subhuman primates may occur before ovulation. This brings about a period of adolescent sterility.

Psychoanalytic theory equated menarche with a physiological sign of the castration of the female sex. As if menarche were a puberty rite cast upon women by nature itself, it is expected to be accompanied by intense emotional reactions and is surrounded with superstition.^[3] The anticipation of menstruation as well as the conscious and unconscious responses to it are motivated not only by biological but also by cultural factors. In our present civilization education and hygiene prepare the girl for menarche in a sympathetic way. This seems not only to diminish the fear of menstruation but also to lessen its often painful accompaniments. Not educated in the fear of becoming women, girls expect menstruation with eagerness. This generalization, however, does not mean that girls are never disappointed by the experience. There are anatomical variations, not pathological per se, and

hormonal conditions that cause menstrual cramps, lower backaches, and other discomforts.

Not only adolescent girls but also mature women often have anxiety dreams before the menstrual flow sets in that may be interpreted as fear of mutilation. Whether the anxiety dream originates in castration fear or in penis envy has to be investigated in each case. There are other causes of the woman's fear of being a woman. Menstruation forecasts the pain of defloration and, even more significant, injuries connected with childbearing. Menstruation enforces the awareness of the organ that until menarche is not part of the body image. It also activates the process of integration of the latent, partial identification with the mother toward the future task of childbearing. Fliess formulated this process by calling attention to the womb (Gegar-mutter) as a symbol of mother. When menstruation stimulates the awareness of the uterus as an integral part of the body, "mother enters the body" (p. 216).

The next step in the girl's development is to accept "mother-womb" as part of the self and with it to accept herself as a future mother and motherhood as a goal of her femininity. The maturation toward the female procreative goal depends upon the previous developmental identifications with the mother. If these identifications are not charged with reciprocal hostility, the girl is able to accept her heterosexual desire without anxiety and

to regard motherhood as a desired goal. This, in turn, determines the girl's reaction to menstruation. If the feminine sexual function is desired, the girl accepts menstruation without undue protest. In contrast, if the bisexual (phallic) fixation dominates her psychosexual development, hostility toward the mother continues as a protest against menstruation and against other aspects of femininity.

In the study of the adolescent struggle to achieve psychosexual maturity, the question arises whether the culturally imposed restrictions on sexuality—the demands of the superego—have any influence on the maturation of the procreative physiology. The correlation is not a simple one. Although physiological maturation may be arrested because of inhibiting emotional factors, one cannot generalize and assume that the stronger the prohibitions and the related anxiety and guilt, the longer procreative maturation will be delayed. In this regard, constitutional, genetic, and intrauterine influences may determine the effect of interpersonal (experiential) factors. If all variations were to be arranged in a continuous series, at one end would be those cases in which the stability of the physiological processes is such that normal procreative maturation is not influenced by emotions, and at the other end would be those in which emotional factors can prematurely arrest maturation. The greatest number will lie between the extremes and present a variety of disturbances in coordination with the various phases of procreative physiology. Correct

psychosomatic diagnosis tends to evaluate the proportionate relation and interaction of organic and psychological factors in every symptom. This general principle of psychosomatic pathology is pointed out here in connection with menstruation because menstruation is a cornerstone of female development, a focal point where physiological and psychological factors meet and forecast whether adaptation to sexuality and the tasks of motherhood will succeed or fail.

The Sexual Cycle

In woman the ebb and flow of the gonadal hormone production renders the interaction between endocrine functions and psychodynamic processes accessible to study. The first such investigation was published by the author in collaboration with Boris B. Rubenstein. In spite of the complex and variable superstructure of human personality, it was demonstrated that the emotional manifestations of the sexual drive evolve in correspondence with the ovarian hormone production; the gonadal cycle and the psychodynamic response pattern represent a psychosomatic unit —*the sexual cycle*.

The cycle begins with the gradual production of estrogen; parallel with this the emotions are motivated by an active, object- directed, heterosexual tendency. The estrogenic phase is usually accompanied by a sense of well-being. The direct manifestations of the heterosexual tendency are recognized in dreams and fantasies as well as in behavior. If the desire is not satisfied, the emotional tension may increase parallel with the hormone; restlessness and irritability, even anger and anxiety, may be signs of thwarted sexual urge. The heterosexual tendency can be recognized also in the defenses against it; hostility toward men can express heterosexual tendency by covering it up. Defenses are simple or complex ego operations that, although disguised, reveal the psychodynamic tendency. They occur in any phase of the cycle, allowing for variations in the emotional manifestations of instinctual

tendencies.

Shortly before ovulation a minimal progesterone production occurs. The heterosexual tendency, fused with the passive-receptive tendency directed toward the self, intensifies the need for sexual gratification. If frustration is anticipated, the increased physiological tension stirs up suppressed conflicts that may bring about the exacerbation of symptoms. The emotional manifestations of this hormonal state vary depending on the individual's age, emotional maturity, and also on the availability of gratification; a tense emotional state characterizes the preovulative state. After ovulation relief from preovulative tension follows. Then the increased receptive tendency fused with heterosexual tendency creates the highest level of psychosexual integration, that is, the biological and emotional readiness for conception.

Ovulation is a unique physiological event, accompanied by systemic reactions. The best known is the heightened basal body temperature. From the point of view of psychodynamics, the somatic preparation for pregnancy is accompanied by the introversion of libido; the woman's emotional interest shifts to her own body. What one may describe as "narcissistic" characterizes that phase of the cycle in which the woman is most desirous for intercourse. The heightened libidinal state is felt as a satisfaction with her body, an assurance that she is lovable and therefore she can let herself be loved. On the

basis of psychoanalytic observations only, Helene Deutsch made the generalization that “a deep-rooted passivity and a specific tendency toward introversion” are characteristic qualities of the female psyche. These propensities are intensified in correlation with the specifically female gonadal hormone—lutein-progesterone—in correspondence with ovulation. This observation justifies the assumption that the specific retentive and receptive tendencies are the psychodynamic correlates of the “mother instinct.”

After ovulation the progesterone phase evolves. This is a high hormonal phase since both hormones, estrogen and progesterone, are produced. But the psychological manifestations of the heterosexual tendency appear masked, overshadowed by the emotional preparation for motherhood. The wish for pregnancy, or the fear of it, or hostile aggressive defenses against it may be on the surface of the psychoanalytic material. On a deeper level the biological learning process can be recognized. Introduced by the introversion of psychic energies, the increased receptive and retentive tendencies mobilize the memory traces of infancy, the oral dependent phase. While these appear “regressive,” compared with the genital level of the psychological material during the estrogen phase of the cycle, they repeat and represent the vicissitudes of the developmental identifications of the girl with her mother through which “motherliness” evolves. In the psychophysiologically well-defined progesterone phase of the cycle are telescoped the oscillations of those processes by which the dominant tendencies of infancy —the need to

be fed and taken care of—are replaced by an adult woman’s ability to give, to succor, to be a mother. In adolescence the psychological material of the progesterone phase is often characterized by the repetition of conflicts related to the mother in various phases of development. Mood changes, overeating, or anorexia indicate the exacerbation of developmental conflicts during this phase of the cycle. As the physiological and emotional maturation progresses, the progesterone phase reflects the “reconciliation” with the mother, the reconciliation of the conflicting tendencies toward motherhood.

Upon the decline of progesterone production, the *premenstrual* phase follows. With the diminishing progesterone, which in the later phase of the cycle inhibits estrogen production, the gonadal hormone level declines. Parallel with this process a regression of the psychosexual integration seems to take place; pregenital manifestations of urethral and genital eliminative tendencies motivate the psychodynamic trends. This regression and the increased general irritability of the sympathetic nervous system are manifestations of the moderate degree of ovarian deficiency of the premenstrual phase, which is a significant factor in what Freud termed the recurrent “neurosis of women.”

Few women are completely free from mood changes and from discomfort during this part of the cycle. The symptom manifestations show great variation. Apprehension of what might happen to one’s body, fear of

pain and mutilation, recurrence of other infantile fantasies may lead to anxiety, excitability, and anger. In other cases fatigue, crankiness, sensitiveness to being hurt, and weeping spells characterize the “premenstrual depression.” The low hormone phase is probably just one of the factors responsible for the fact that at this phase of the cycle all needs and desires appear imperative, all frustrations seem unbearable; the emotions are less controlled than at any other time during the cycle. This is characteristic of sexual behavior also. The heterosexual desire that occurs during the late premenstrual phase (stimulated probably by the beginning of the next cycle) often appears more intense and demanding than the sexual desire at the peak of the cycle.

The end of the sexual cycle is marked by menstrual flow that, ushered in by a sudden decrease of hormone production, continues for several days. Soon after the flow is established, the tense and fearful mood relaxes, the excitability decreases, and the depression lifts.

The course of the sexual cycle shows that the gonadal cycle forces the emotional processes of the adult woman into regulated channels. This was confirmed soon after the preliminary publication of the sexual cycle research and by more recent investigators. Gottschalk, *et al.*, observed the ovulative change, that is, the progesterone effect. Their investigation measured the variations in basic affects—*anxiety and aggression*—and found that the

intensity of both diminished transiently about the time of ovulation; they found that data from multiple cycles show the effects of the menstrual cycle on the emotional responses measured. The large-scale investigation of Moos, *et al.*, is based on the measurement of the levels in mood changes throughout several complete cycles of the same individual. Their findings are generally consistent with the findings of the first investigation (Benedek and Rubenstein) of the sexual cycle. The variables measured in their investigation changed in cyclical fashion related to the menstrual cycle. These investigations show that neuroendocrinological influence is recognizable in such general manifestations as moods that transiently pervade the ego state.

These investigations show the effect of hormones on the emotional processes. But affects and emotions exert influence upon the hormonal cycle also. The comparative study of a series of cycles in the same woman reveals the effects that stimulating and inhibiting emotional factors have upon the course of the gonadal cycle. It is well known that emotions may precipitate or delay the menstrual flow; less known is the fact that ovulation may vary under emotional influence. Although ovulation occurs, on the average, in the period from the eleventh to the seventeenth day of the cycle, the variation in the time of ovulation is such that probably no immutable period of infertility exists in the human species. Such condition occurs approximately the last week preceding menstruation. Besides the direct and immediate effects of emotions upon the hormonal cycle, psychic factors exert long-term influence

on the gonads, as the symptom of psychogenic infertility indicates.

The comparative study of the sexual cycle of several individuals who were psychoanalyzed reveals that the pattern of the sexual cycle unfolds in interaction with the constitutional and environmental factors that determine the developmental organization of the personality. In the evolution of the gonadal cycle, estrogen is necessary for the completion of ovulation and for the ensuing progesterone phase. Similarly, in the integration of psychosexual maturity, the capacity for heterosexual love prepares the woman for acceptance of the feminine sexual role, not only the physiological processes of childbearing, but also the emotional manifestations in motherliness.

Just as psychosexual maturation is an interrelated sequence of physiological processes, so the phases of the sexual cycle represent a transactional sequence, one phase determining the course of the other. Although estrogen is produced in varying degrees from infancy on, progesterone appears only after puberty as a function of the ovum. If the individual reaches psychosexual maturity without fixating traumata in the pregenital phases, the relationship between the estrogen and progesterone phases of the cycle will be normal; this implies practically normal ovulation and average length of cycles. If, because of organic disposition or crippling traumata or both, fixation occurs on a pregenital level, the disturbance of the psychosexual maturation is reflected in the cycle. For example, in puerile,

bisexual individuals the progesterone phase is short. Such a woman has short cycles. Women whose infantile fixation causes a prevalence of receptive tendencies (in cases of bulimia, obesity) usually have long, low-level progesterone phases. If the psychosexual development is even more defensive against the feminine reproductive goal, as it is in anorexia nervosa cases, the psychosomatic symptoms may lead to the complete suppression of the gonadal cycle, thus to sterility.

Orgasm and Frigidity

The investigation of Masters and Johnson clarified the physiological process of “the human sexual response.” They pointed out the interrelatedness and the differences between the sexes in this area of physiology. The four distinct phases through which coitus, or any sexual manifestation that moves toward orgasm, passes is terminated by ejaculation in men. When, through the excitement and plateau phases the process reaches the point of full testicular elevation, the sensation of impending ejaculation is uncontrollable, an autonomous, reflexive process. In women the clitoris and outer third of the vagina constitute a functional unit. Since the clitoris consists of erectile tissue, it builds up the orgasmic platform at the outer third of the vagina. Because of this, clitoral and vaginal orgasms are not separable in the sense of physiology. Experientially, however, women differentiate “clitoral” orgasm from “vaginal” orgasm; the former can be attained by any adequate stimulation; the latter often remains under the threshold of sensual awareness. The fact that there is a built-in physiology of orgasmic apparatus in women does not necessarily indicate that the process is identical in both sexes.

The female orgasm is attained through the tumescent reaction of the clitoris during the excitement phase with its consequent retraction into the clitoral hood (prepuce), which functions like a “miniature vagina” during the

plateau phase (p. 78). If stimulation is reduced the retracted clitoris descends, that is, regains its normal size. The retraction and descent of the clitoris can be repeated several times during the orgasmic process; the stimulation, however, has to be maintained until the orgasmic process is completed, since the woman's orgasmic process is interrupted at any point of the response pattern if stimulation ceases. This is evidence that the woman's orgasm is not an autonomous process; the evolution of the response pattern depends on the male's ability to maintain effective stimulation.

The human sexual response is (not independent of but related to its physiology) an experience of the total personality. It is even more complex: human sexual experience is the outcome of a transactional process between two individuals, normally of different sex. Beginning with a surge of physiological and emotional "chemistry" that is experienced as sexual attraction, a flood of libido quickens the sexual response in man and woman. The heightened libidinal state is felt as a satisfying state of one's own body and gives rise to a libidinal sensation in the genitals—erection in man, and sensation of moisture in the vagina in woman. This sets in motion "modes of behavior" that maintain reciprocal stimulation until the initial reaction becomes a satiating orgasmic experience. Whatever sexual tactics and techniques human couples may employ to develop, enhance, prolong, and vary their experience, it begins with the man's tendency to take over and the woman's wish to submit. This quality of the sexual drive enhances the

empathy of the lovers for the need or desire for the other. The “modes of behavior” express the emotions that make the technique of love-making effective. While the physiology of the sexual response is universal, the modes of behavior that bring about orgasm have innumerable variations. From these each man and woman adopt a few—some more, others less. Motivated by the unconscious representations of their developmental past, these behavior patterns are charged with the current flow of libido and help to arrive at the completeness of the mutual experience.

Is the experience of the male and the female identical or comparable? Much has been written about this, especially since orgasm as an equal birthright of woman has focused attention on the problematic nature of women’s capacity for orgasm. Kinsey assumed that frigidity is a biological characteristic of the female sex since the vagina has no sensory nerves; embryologically the vagina is homologous to the shaft of the penis; the sensory cells known as “genital corpuscles” are confined in the glans clitoridis in woman, as they are in the glans penis of man.

The woman, however, not only perceives the orgasm that she excited in her sexual partner, but she also continues actively to add to the stimulation that she receives. The muscle contractions involved in preorgasmic tension and orgasmic release, which extend beyond the musculature of the pelvic organs, the buttocks and involve her whole body, add actively to her receptive

gratification. Yet experience shows that women are so active only if their lovers desire it. Otherwise, women can relax in the flow of their receptive feelings, not worried whether the orgasm is complete or not. Observations indicate that women, especially young and unmarried women, consider their sexual experience satisfactory if their performance gratifies the partner and is praised by him.

The difference in the meaning of sexual experience is rooted in the biological difference in the aim of the sexual instinct, and its consequence in the personality organization of the woman. It is a biological characteristic of man that he be “dominant” and by achieving orgasm impregnate his mate. It is a cultural achievement that also requires men to be concerned with the sexual gratification of their women. The empathic, intuitive responsiveness makes the sexual response truly human. By achieving sexual gratification for himself, man also aspires to give gratification to the other, the object of his love. Probably this is the biological “reason” that such orgasmic experience elevates man’s ego beyond what is the result of sexual gratification. It consolidates his sexual identity as it also forges the link of identification with the woman who enables him to have such an experience of his virility.

Women also experience a gratifying expansion of their feminine self as a result of orgasm. Yet the woman’s sexual identity does not depend on her orgasm to the same degree that the man’s does. Her sexual experience, stirred

by the feeling of being loved, desired, and cherished, overflows to her sexual partner in sharing his experience. Women, however, generally do not consider the male orgasm as their own achievement. This kind of elated reaction to their own achievement that men experience after satisfactory, especially after mutual orgasm, women frequently attribute to parturition. Then the feeling of a job well done, having produced a miracle, flows over the woman's ego state and encompasses her infant in her psychic system. Of course, this sensation is not "orgasm," however strong the narcissistic gratification may be, but it indicates that woman's sexual identity is invested more in the aspiration to bear children than in orgasm.

The orgasm of women is "hidden," introverted, and diffuse in comparison with the orgasm of men. Our knowledge of the phasic course of the physiological orgasmic process does not clarify the variations in the sexual response of the same woman with the same mate (and even with different sexual partners). Our knowledge of the sexual cycle, the (gonadal) hormonal stimulation of psychodynamic (instinctual) tendencies, may help to account for variations in the desire for sexual intercourse; however, this in itself does not influence the intensity or the quality of the orgasm. The more we study the sexual experience of women, the further away we get from its physiological substratum, described by Masters and Johnson. The developmental integration of the sexual drive with the personality organization has been pointed out. Here it should be added that the ego in

interaction with the drive experience may build up defenses in each phase of development that make free experience of orgasm impossible. This is true for both sexes, but, in general, man's potency is less frequently affected than woman's capacity for orgasm. Biological and psychological factors interact in causing the vulnerability of woman's capacity for orgasm.

Since the sexual response of women is variable and diffuse, when is frigidity as a diagnostic label justified? Psychoanalytic theory considers frigidity a derivative of personality development, a neurotic symptom. Bisexuality and its consequent "penis envy" is the rock bottom of the developmental conflicts that may (or may not) lead to frigidity. The term should be used with caution. Every woman experiences at some time the shrinking feeling of withdrawal that does not seem to tolerate the most tender touch. Indeed, passionate women may often experience such transient frigidity. Those women who are unaware of the vaginal participation in their clitoral orgasm are not "frigid" either. Really, there are many fewer frigid women than one used to assume.

Frigidity can be related to hormonal dysfunction only in rare cases of severe hypogonadism. Women may have all forms and degrees of frigidity and still have normal gonadal function.^[4] Fear of being injured by the penis, fear of being impregnated, and hostility toward men often bring about inhibitions in the woman's capacity for orgasm. Since the social and

emotional significance of frigidity is different from that of impotence, women often use the suppression of their own sexual needs as a weapon against their husbands, especially in times past when orgasm, or the desire for it, was considered unwomanly. The effect of the sexual mores that prescribe the "complete orgasm" as a necessary requisite of woman's fulfillment does not appear much healthier. This may increase in many women the anticipation of frustration. Because of this such women watch the course of the act with anxious impatience; thus they interfere with what they are seemingly eager to achieve.

Dyspareunia, painful intercourse in women, may be caused by local injury, by pathological and inflammatory lesions due to anatomical anomalies of the urogenital structure. But the Greek word *dispareunia*, means "badly mated." It was known in Hippocratic times that pain or fear of pain can be utilized to render intercourse unbearable. *Vaginismus* is a spasm of the vaginal muscles. The spasm may be located in different areas of the vagina; it indicates extreme aversion to coitus against which the spasm is a somatic symptom of defense. This symptom, as well as the milder form of *dyspareunia*, may be cured by another mate. Above and beyond the fantasies that these symptoms may express, *vaginismus* achieves its unconscious goal by excluding the penis, by expelling it, or by painfully enclosing it. Since the vagina is a receptive organ, *vaginismus* can be considered as an expression of powerful in incorporative tendencies; it seems to be the realization of men's

fearful fantasy of the “vagina dentata.” Vaginismus occurs usually in young women whose psychosexual makeup reveals, besides pregenital fixations, a general sexual infantilism.

Separating the interacting factors responsible for the somatic consequences of the serious forms of frigidity, one may assume that besides the constitutional predisposition, the primary factors are psychological, originating in the pregenital development. The chronic stress that evolves through each gonadal cycle may in time suppress the cyclical evolution of gonads, creating anovulatory cycles and infertility. The stagnation in the pelvic organs may involve the autonomic nervous system, causing vasodilatation, and further stasis in the pelvic and sexual tissues. Although frigidity may be a transient manifestation of moods and cannot be considered a symptom, it might have somatic consequences if caused by unresolved developmental conflicts that have interfered with the normal course of the sexual physiology of the woman.

The Procreative Function and Its Decline

Woman's reproductive physiology is phasic. One phase, the monthly cycle that prepares for conception, is repeated from menstruation to menstruation; the other evolves after conception, regulated by the physiology of pregnancy, parturition, and lactation. It is a physiological characteristic of woman that her reproductive function—the progesterone phase, pregnancy, and lactation—goes hand in hand with an increase of receptive and retentive tendencies; they are the psychic representations of the need for fuel to supply energy for growth.

Pregnancy

When conception occurs the cyclical function of the ovaries is interrupted and is not reestablished with regularity until lactation is terminated. Because of the enhanced function of the corpus luteum, the psychodynamic processes of pregnancy can be understood as an intensification of the progesterone phase of the menstrual cycle. The metabolic processes, necessary to maintain the pregnancy, augment the vital energies of the mother. The pregnant woman's body abounds in libidinous feelings. This is the manifestation of the reciprocal processes between the mother and the fetus, of the biological symbiosis. Some women enjoy this narcissistic state of "vegetative" calmness; others, especially in the second trimester of pregnancy, find outlet for their physical wellbeing by enlarging

their activities. As the metabolic and emotional processes of pregnancy replenish the primary narcissism of the woman, this becomes the wellspring of her motherliness. It increases her pleasure in bearing her child, stimulates her hopeful fantasies, and diminishes her anxieties. While the mother feels her growing capacity to love and to care for the child, she actually experiences a general improvement in her emotional state. Many women who suffer from neurotic anxiety are free from it during pregnancy; others, despite the discomforts of nausea and morning sickness, feel emotionally stable and have the "best time" during pregnancy. Thus healthy women demonstrate during pregnancy, as during the high hormone phase of the cycle, an increased integrative capacity of the ego.

Although pregnancy is biologically normal, still it is an exceptional condition that tests the physiological and psychological reserves of women. There are many attitudes, realistic fears, and neurotic anxieties that disturb the woman's desire for pregnancy. Some of these may be motivated by realistic situations. Bad marriage, economic worry, or conception out of wedlock may cause the pregnancy to be unwanted and the infant rejected before it is born. Even such pregnancies usually have a more or less normal course. Only if the psychosexual organization is laden with conflicts about motherhood do actual conditions stir up deeper conflict and disturb the psychophysiological balance of pregnancy.

Psychoanalytic observations trace the “existential anxiety” of a woman to the beginning of her life. The complex steps toward motherhood and motherliness begin in the mother’s own oral phase of development. It seems that the memory traces of those experiences that were never conscious are repeated in the psychodynamic process of normal and pathological pregnancy. Passive dependent needs having been revived, the pregnant woman thrives on the solicitude of her environment. If her needs are unfulfilled, the frustration may activate the well-known symptoms of nausea, morning sickness, and perverse appetites. These symptoms seem to diminish in frequency and intensity under cultural influences. Such subjective symptoms of pregnancy are minimal in women who, becoming pregnant by mutual consent, can count on their husbands’ care and loving participation in their great experience. Mood swings, however, occur in every pregnancy, especially during the first trimester, when the endocrinologic adjustment may cause fatigue, sleepiness, headaches, vertigo, and even vomiting. These symptoms are usually alleviated as the pregnancy progresses. During the last month the increasing bodily discomfort, disturbance of sleep, and fears connected with parturition may again interfere with the contented mood of pregnancy.

Self-centered and dominated by receptive and retentive tendencies, the pregnant woman is in a regressed, vulnerable ego state. The integrative task that the woman has to face physiologically, psychologically, and realistically is

much greater than she has had to meet previously. In some cases the adaptive task appears greater with the first child. The physiological and emotional maturation of the first pregnancy makes motherhood generally easier with the second and third child. Yet it may happen that fatigued by the never ceasing labor of motherhood, women experience pathogenic regressions during later pregnancies.

Normally the psychodynamic regression of pregnancy and lactation serves as a source of growth and development; however, it harbors dangers for those whose ego cannot withstand the psychodynamic processes inherent in the procreative function. External circumstances, such as lack of love from the husband or other disappointments, may stir up the deep-seated conflicts of motherhood. Then the frustrated pregnant woman, like a hungry infant, cannot find gratification within herself; consequently the symbiosis evolves as a vicious circle. The frustrated, hostile pregnant woman becomes anxious since she senses her inability to love her child. The rejection of the pregnancy goes hand in hand with the hostility toward the self, the rejection of the self. Anorexia, toxic vomiting, and consequent severe metabolic disturbances such as eclampsia are “equivalents of depression,” the psychosomatic symptoms of pathological pregnancy.

It is a well-established concept of psychoanalysis that regression to the oral phase is the psychodynamic condition of depression. Since such

regression is inherent in pregnancy and lactation—even in the progesterone phase of the cycle—depression of varying severity and psychosomatic conditions of oral structure are the basic manifestations of the psychopathology of the female propagative function. Further elaboration of the primary pathology depends on the total personality of the woman. A detailed discussion of the psychopathology of pregnancy cannot be included here. It will suffice to say that the individually significant fantasy may be recathexed during pregnancy, thus influencing its emotional course. For example, if the hostility is concentrated on the embryo, women may have fantasies of harboring a monster, a gnawing animal, a cancerous growth. This gives rise to panic or psychotic hypochondriasis. The aggressive impulses toward the embryo may be experienced as inadequacy in taking care of the child. Phobic reactions, even suicidal impulses, may represent defenses against hostility toward the content of the womb. There are many common infantile fantasies. In some instances the “missing penis,” in others the envied beauty of the mother or envy of her pregnancy, is the nucleus of the fantasies projected on the embryo.

The fetus is a part of the mother’s body. Normally the fetus is cathected with narcissistic libido. This does not always mean pleasurable emotional sensations. There are many ambivalent tendencies in the mother’s self-concept that may be projected to the unborn child. Thus the fetus can represent the “bad, aggressive, devouring self,” engendering the fear of having

a “monster.” Many women identify the fetus with feces and relive during the pregnancy the ambivalent feelings and the mysteries of the “anal child.” There are many instances in which the regressive fantasies do not interfere with the pleasurable expectation of pregnancy. The mother’s object relationship to the unborn child becomes strongly hostile, however, when the fantasy that is projected to the child is charged with ambivalence. The anxiety and depression so caused may remain on the level of neurosis. It depends on the predisposition of the personality whether the anxiety activates a true psychosis with hallucinations, paranoid defenses, and schizophrenic reactions, endangering the woman and her fetus.

Parturition

Parturition is not a growth process as pregnancy and lactation are. It is the physiological interruption of pregnancy that mobilizes, even if transiently, the “basic anxiety” of women. The fear of labor is universal. Even those women who do not anticipate labor with apprehension may suddenly experience cataclysmic anxiety during critical phases of parturition. Modern obstetricians are aware of the significance that sudden and violent emotions have on the course of labor, just as psychiatrists are aware of the influence of obstetrical traumata on the mother and her relationship to the child. A long period of severe labor pains may activate severe postpartum reactions. Pain is a subjective experience. Even if it is caused by organic processes, the

experience of pain depends in a particular way on the experiencing ego. "Natural childbirth" is based on this fact. This form of mental hygiene of parturition consists in preparing the woman's ego for experiencing childbirth by reducing the fear-tension-pain circuit and thus reducing the intensity of pain.

The exaggerated expectations of the effect of mental hygiene 011 parturition harbor psychiatric hazards. There may be unexpected obstetrical complications that interfere with the course of delivery. There are also psychological complications of labor. One of them is the woman's disappointment in herself if she cannot "behave" during labor as her self-respect requires. The sense of failure may then activate inferiority feelings, hidden under the cover of a perfectionistic ego ideal. Since "natural childbirth" permits the woman to feel responsible for what she has to endure, the obstetrical trauma may become complicated by a narcissistic blow. The psychopathological effect of this varies according to the personality of the mother and the maturity of her motherliness.

The Postpartum Period

The trauma of birth interrupts the biological symbiosis. The hormonal changes that induce and control parturition, the labor pains, and the excitement of delivery interrupt the emotional continuity of the mother-child

unity. It is, indeed, a biological model of “separation trauma.” During the last phase of labor the mother usually concentrates upon her own survival. After delivery the love for the newborn wells up in her as she first hears the cry of the baby. This sensation reassures the mother of the continuity of her oneness with the child. But it may not avoid spells of tearful sadness that often occur, with a pervading sensation of vulnerability, probably a result of hormonal imbalance. In a recent investigation Hamburg⁸ compared the mood of postpartum women to premenstrual depression since both conditions are referable to a sharp drop in progesterone production. Incipient postpartum depressions are frequent, especially in primiparas who experience an emotional lag after delivery. Disappointed by a lack of feeling for the infant, they feel “empty” and cry frequently. The free flow tears is similar to the symptom of premenstrual depression. It depends on the personality of the woman whether her lack of immediate love for her child will activate a sense of guilt in her, make her insecure about her ability to be a good mother, and therefore cause her to withdraw from the infant. The incipient depression often goes unnoticed and is cured by the love and affection that the woman receives from her husband. This helps to overcome the fear of being alienated from her child. More serious postpartum reactions usually evolve during the first or second trimester; these conditions are beyond the scope of this chapter.

Lactation

The organism of the mother is not ready to give up the symbiosis after parturition; biologically and psychologically she prepares to continue the symbiosis through lactation." Lactation is stimulated and maintained by prolactin, a hormone of the anterior lobe of the pituitary. This usually suppresses the gonadal function and induces an emotional attitude that is similar to that of the progesterone phase of the cycle.

During lactation, just as during the progesterone phase and pregnancy, receptive tendencies gain in intensity; they become the axis around which the mothering activities center. The woman's desire to nurse the baby, to be close to it bodily, represents the continuation of the biologic symbiosis, not only for the infant, but for the mother as well. While the infant incorporates the breast, the mother feels united with the baby. The identification with the baby permits her to "regress," to repeat (on the unconscious level) her own receptive incorporating wishes. Lactation permits a slow, step by step integration of motherliness. (Benedek, 1949 p. 647)

Motherliness in women is not a simple response to hormonal stimulation brought about by pregnancy and the ensuing necessity to care for the young. Instead, motherliness in humans develops through the cyclical repetition of hormonal stimulation, which, interacting with other aspirations of the personality, reaches functional maturity through complex processes of personality development.

In each act of mothering we might differentiate two levels of motivation. One is dominated by the emotional manifestations of the passive, receptive-retentive tendencies; the other, more accessible to consciousness, mobilizes the loving, succoring activities of the mother. In simple societies the biological and ego aspirations of the woman are easily integrated in her ego ideal. Our culture, however, conveys to the woman an active, extraverted, "masculine" ego idea, which may conflict with the passive tendencies inherent in the procreative function. Consequently women may respond with defenses to the biological regression in motherhood. If they cannot permit themselves to be passive, to enjoy lactation, they deplete their source of motherliness. Such women respond with guilt and anxiety and often with a sense of frustration to their inability to live up to the biological functions of mothering. It may be that the mother-child symbiosis can best be maintained by maximum physiological participation such as in breast-feeding; in many instances, however, encouraging the mother to bottle-feed the infant is the better counsel since it may lessen the potentially disturbing ambivalence of the mother and improve the mother-child interaction.

In spite of hormonal control, lactation is influenced by emotional attitudes and may be suppressed by volition. This leads to such statements as "The ability to nurse is equivalent to the will to nurse" (Kroger & Freed p. 182). This is, of course, an oversimplification of those processes through which emotions affect physiological processes. Galactorrhea, a free flow of the

breast during pregnancy or after weaning, is caused by the structure of the gland, yet it seems to be under emotional influence also since it may occur if the woman sees another lactating.

Not only the attitude of masculine protest can motivate the psychopathology of mothering. There are women for whom the instinctual gratifications of mothering remain an everlasting temptation, who enjoy pregnancy, lactation, and caring for the infant as long as he is completely dependent. As if the procreative function of these women were completely under physiological controls, they are unable to develop an object relationship with the child beyond infancy. Psychologically such women do not mature through motherhood. They neglect each child as they become pregnant with the next, often abandoning their child because they can not cope with the responsibilities of motherhood for growing individuals.

Less known manifestations of postpartum pathology are those that, originating in the mother's fear of separation from the infant, intensify her receptive, incorporating need and consequently that of her child. Beata Rank observed the "transmission" of conflicts by which infants become feeding problems. Escalona deals with a broader concept of contagion. The present author interprets these processes in terms of the reciprocal processes of the postpartum symbiosis.

The mother's receptive needs toward the child are not easily recognized. From the time of conception the offspring stimulates her receptive tendencies; after parturition the newborn remains the object of these instinctual tendencies. With her baby the mother feels whole, complete, but not without him. Many young mothers feel "emptiness" when they leave the baby, are compelled to eat, or become anxious and worried. This indicates an increased tension in their receptive needs. The affect hunger of the mother, her need for love and affection, her wish to reunite with her baby, to overprotect and overpossess him are all exaggerated manifestations of the very emotions that originate in the psychobiological processes of motherhood. As if the separation of parturition could be undone, mothering and each manifestation of love for the child may be fused with an urgent need to hold on to him. Characterizing such mothers, we speak of "overprotective, possessive" mothers. As the mother clings to her child, he becomes for her psychic economy (at least partially) the needed, loved, and hated object of her infancy. Reciprocally the child, affected by the incorporative need of the mother that does not allow self-differentiation,^[5] responds to any attempt toward independence as if it meant separation, deprivation of love and protection. Thus the child remains dependent; the emotional symbiosis continues for an undue and often interminable period.

Psychosomatic Infertility

Infertility, if not caused by organic pathology, can be considered as a defense against the dangers inherent in the procreative function. There are few known reasons for absolute infertility, but reasons for relative infertility are manifold. It is generally assumed that besides delayed physiological maturation that may change with time and sexual experience, the psychosexual development is responsible for psychosomatic infertility. It is assumed that emotional factors may play a role in functional infertility, even when some organic pathology is present.

Investigating the factors that bring about functional infertility, one has to take into account the constitutionally “given” differences in the fertility rates in women. It would be almost impossible, however, to establish a complementary series of fertility rates from one extreme to the other. The variables are too numerous. In some individuals fertility varies under the influence of interpersonal factors such as reliance on the mate’s support in the case of pregnancy, his sexual potency, and, of course, his reproductive potential. It is necessary to emphasize that fertility (although in much less degree than the woman’s capacity for orgasm) is a conjugal phenomenon.^[6] The next category of causative factors lies in the developmental history of the woman. In general, investigations confirm that the psychogenetic course of the mother-daughter relationship is an essential factor in the development toward motherhood. But the concepts of developmental processes do not clarify the pathogenesis of this unique symptom. In the third category belong

the cultural processes that, in interaction with the former factors, play a role in the organization of the personality and may modify the woman's attitude toward motherhood.

The woman responds to the tasks of motherhood during the progesterone phase of the cycle from puberty on. Normally, through the monthly repetition, she overcomes her anxieties and absorbs the conflicts of childbearing. It is difficult for those women who as adolescents perceive the stimulation of the progesterone phase with signal anxiety. When developmental conflicts reinforce the signal anxiety, the primary anxiety that originates in the fear of pregnancy may be repressed, but the related conflicts exert a stress, a continuous and monthly intensified charge of defensive psychic energy that may lead to suppression of ovulation. Such a process may interfere with full maturation of the gonadal cycle, but it occurs often after full maturation, even after one or two full-term pregnancies.

The unconscious conflicts that may lead to infertility operate through interaction of neurohormonal and psychological processes; sometimes it appears as if they acted through reflexes activated by the primitive affects of fear and rage. Reflex action may play a role in infertility by a spasm of the fallopian tubes, which may be transitory or persistent. This form of infertility occurs in anxious, hysterical women. It seems justifiable to differentiate between the psychodynamics of infertility in these women and in those

active, capable, and adaptable women who, except for functional infertility, are well-integrated, healthy individuals. In these instances infertility develops as a somatic counterpart of the characterological defenses. Among infertile women there are many whose ego aspirations are in conflict with the propagative function.

“Relative infertility” may be the result of long-practiced birth control, not only with oral contraceptives, but with other methods also. Birth control may be achieved, of course, by inhibition of the heterosexual drive. Women who are afraid of men and marriage are not considered infertile from a diagnostic point of view, yet the psychoanalysis of unmarried women often reveals that fear of childbearing is the primary motivation for their sexual inhibition. Women may appear sterile if the desire for intercourse is suppressed during the fertile period and coitus takes place only during the infertile phases. This method of birth control is practiced voluntarily, but it is a “masked practice” of “rhythm.” Another “masked practice” occurs in those cases of relative infertility in which ovulation occurs during menstruation when coitus usually does not take place.

The investigations of Seward, *et al.*, confirm psychoanalytic observations that women, frustrated in their instinctual wish for motherhood, often clamor for pregnancy. Yet this does not exclude the possibility that the same women may avoid conception or would suffer severe anxiety if they

conceived.

This condensation of the multiple factors that may lead to infertility does not clarify the psychopathology of the symptom. What is primary, the somatic or the psychological process? Its somatic core is the “inhibition” or suppression of gonadal hormone production that evolves in constitutionally predisposed individuals under intraorganismic “stress.” In this context stress means the defensive cathexis against the signal anxiety that prevents the basic anxiety from breaking through. Infertility, a psychosomatic defense against the dangers of pregnancy, parturition, and motherhood, is a condition that fits into the “flight pattern” of reactions to anxiety.

Under the influence of a variety of experiences, functional sterility can end with a spontaneous cure. It is assumed that adoption often “works miracles” and facilitates successful childbearing. It would be easy to hypothesize that direct contact with an infant relieves the woman’s anxiety about childbearing. Psychoanalytic explorations of such couples reveal that the conditions that facilitate conception, the sexual and emotional relationship between husband and wife, had improved before the adoption occurred. The therapeutic effect of psychoanalysis in cases of infertility can often be explained on the same basis; in other instances one may have evidence of the resolution of the conflict that impeded the woman’s potential to become pregnant. The effects of hormone therapy with gonadotrophic

hormones have been demonstrated, but not with gonadal hormones.

Pseudocyesis

This puzzling symptom simulates the signs of pregnancy such as cessation of menstruation, enlargement of the abdomen, breast changes consisting of swelling, tenderness, secretion of colostrum, even milk. It is not a “conversion hysterical” symptom that expresses the frustrated instinctual wish for pregnancy, since many organic factors must cooperate in simulating the course of normal pregnancy, sometimes throughout all nine months. No doubt the personality organization of women who undergo and exaggerate the unpleasant accompaniments of pregnancy without being pregnant may be “infantile” or “hysterical,” may even have the qualities of an imposter, but the most characteristic quality of these women is a faulty reality testing, certainly in regard to pregnancy. In spite of the physiological processes that simulate pregnancy, there are many signs lacking and some are produced voluntarily; thus the woman could have realized that she is not pregnant. The symptom might occur in young women, in adolescents who have never had sexual intercourse. Indeed, the condition is well characterized by Brown and Barglow in the subtitle of their paper, “A Paradigm for Psychophysiological Interactions.”

The psychodynamic factors instrumental in inducing and maintaining

pseudocycsis seem to be opposite to those that account for psychosomatic infertility. The latter is characterized by the lack of ovulation, thus by the lack of lutein (progesterone) production; in the sense of its psychodynamics, the symptom represents defense against the anxiety rooted in the danger of childbearing. Pseudocycsis, in contrast, is induced by the physiological and psychological signs of ovulation. Barglow suggests that the “affect of depression has a crucial significance in the etiology of pseudocycsis” (p. 224). This is consistent with the observation that each phase of the procreative function of woman goes hand in hand with the increase of receptive-retentive tendencies. The psychodynamic correlates of the metabolic need that prepares for and maintains pregnancy may bring about depression in those women whose personality organization regresses under the regressive pull of the physiology of pregnancy. Briefly stated, the persistence of the corpus luteum accounts for the depression that seems crucial for pseudocycsis.

What accounts for the maintenance of the corpus luteum? The wish for pregnancy in itself is not enough. The hormonal complement is afforded by the reciprocal interaction of the pituitary gland and the corpus luteum. The few known steps in this interaction are: (1) the persistence of the corpus luteum suppresses follicular stimulation, thus interrupting the gonadal cycle, and menstruation ceases; (2) the pituitary gland, which produces lactogenic hormones, brings about breast changes. The cessation of menstruation and the breast changes suffice as evidence for pregnancy, especially during the

first trimester. With this evidence the fantasy life of the woman may complete the picture, even if the attitude toward pregnancy is motivated by ambivalent emotions. Various "secondary" psychosomatic symptoms are nausea and vomiting to create another cycle of what sometimes are serious symptoms of pregnancy.

These alterations of the psychobiology of woman's procreative function have been included here to demonstrate the interaction between hormonal and psychological factors; that is, the manifestations of instinctual processes on a level of organization higher than that on which they were discussed in connection with the sexual cycle.

Climacterium

The procreative period in women averages 35 years. Its decline approaches gradually, marked by the cessation of the menstrual flow. Analogous with the terms "puberty and adolescence," the term "menopause" refers to the physiological process, the term "climacterium" to the period of adaptation to the definite "change of life." There are few women who pass through the transition without some psychosomatic symptoms. The increased irritability of the vegetative nervous system, especially the vascular apparatus, causes hot flashes, chills, palpitation, cardiac arrhythmia, and so forth. Mood swings, irritability, paresthesia, vertigo, and other signs of

“nervousness” indicate a lowered tolerance for emotional tension. Since the symptoms usually respond to replacement therapy, it was assumed that the failure of the ovaries brings about the symptoms. The symptoms, however, are only temporary; they, therefore, are due rather to an imbalance of hormones than to simple deprivation. Hoskins assumes that the overproduction of pituitary gonadotrophin—a characteristic feature of the climacteric—may be one factor in prolonging, if not initiating, the disturbance (p. 310).

There is evidence that menopause sets in earlier and often with more intense reactions in women who had never had children than in those who had several normal pregnancies. This is in harmony with the assumption that with complete sexual maturation and function, the regressive emotional manifestations (which characterize the low ebb of the premenstrual hormone state) become absorbed by the adaptional processes of development. On the basis of the woman’s characteristic reactions to this phase of her sexual cycle, one might wager a guarded prediction on the course of her climacterium.

The course of climacterium, just as the girl’s reaction to menarche, changes under cultural influence. The anticipation of the climacterium intensifies the reciprocal interaction between the neurohormonal symptoms and the emotional reactions to them. As long as menopause meant not only cessation of the reproductive capacity but also the end of sexual

attractiveness, the end of the capacity to enjoy sexuality, menopause was a narcissistic blow. This led to the “mortification” that menopause used to mean to many women. It implied that women had to repress sexuality or be ashamed of it. This was probably one of the motivations of the increased sexual excitation that often threatened to break down the previous sexual morals of women.

It is different for most women today. Following the menopause, healthy women respond to the gradual desexualization of their emotional household with an influx of extraverted energy. Their personalities, still flexible and relieved from the responsibilities of child-rearing, seek and find new aims for their psychic energy. As in childhood the repression of sexual impulses led to superego formation and socialization, so in climacterium the cessation of the gonadal function releases new impetus for socialization and learning. Thus when the gonadal stimulation subsides permanently, the healthy woman is not severely threatened by the loss. The accomplishments of the reproductive period, its capacity to love and give, to do for others, will sustain her personality when the woman faces the change of life. With the passing of physiological symptoms, the improvement in her physical and emotional health and her growing interest and activity indicate that the adaptational processes of climacterium may represent actual development in the life of many women.

With aging many of the interpersonal attitudes of the woman change. She does not love with youthful ardor, but much of her ambivalence, jealousy, and insecurity have been overcome. Her love becomes more tolerant and shows more “postambivalent” qualities. These evolve effortlessly toward her grandchildren. Identification with her pregnant daughter or daughter-in-law permits the aging woman to be a mother again. One step removed, she is now less involved; her love for her grandchildren is freer from the conflicts that as a mother she had toward her own children. Through the manifold gratifications within and outside her family, healthy women approach unobtrusively—and many years after climacterium—the physical and mental involution of senescence.

In spite of the positive aspects of climacterium, many women suffer neurotic, psychotic, and psychosomatic manifestations of varied severity. Because these symptoms occur during climacterium, they are usually attributed to the stresses of menopause. Yet the psychoanalytic study of such cases reveals that the symptoms that are aggravated during this period have existed before, or were preformed in the precarious organization of the personality. The trigger of the premenstrual symptoms is the regression that accompanies the low hormone level. As a result the integrative capacity of the ego declines, permitting repressed conflicts and affective reactions to emerge, requiring renewed efforts of repression. Similarly, but even more, the climacteric woman may suffer the permanent cessation of gonadal activity

and the consequent decline of libido production. The sensation that indicates the deprivation of libido I designate as *internal frustration*.^[7] It refers to the inability of the woman to feel love, to feel satisfied with herself or with anything or anybody in her object world. Such a sensation of aridity expresses the lack of libido. The rising intrapsychic tension brings about defusion of the psychic energy. The freed aggression, manifest in the flow of hostility toward the self and others, is the origin of the “agitated depression,” the characteristic symptom of the aftermath of menopause.

The symptom that develops as a result of internal frustration depends on the organization of the personality and on the life experiences motivated by it. The interacting instinctual factors, motivating the pathology, are: (1) the bisexual component played a more than usual significance in the personality development; (2) the narcissistic ego strivings dominate the psychic economy throughout life; (3) these factors interfere with the primary gratifications of female sexuality. The narcissistic gratifications may protect the woman from awareness of her basic lack of fulfillment as long as everything goes well, as long as she is able to do well. Such personalities, however, are often unable to tolerate the disappointment that comes when the ego loses the power to perform according to their own standards. Whether it is a physical symptom that is unacceptable, or fantasies, emotions, or hostile impulses that are ego alien, the woman tries to defend herself with all her ego strength. “This can’t happen to me” is a protest often heard. As the patient perceives her failure in

maintaining the usual level of ego mastery, inferiority feelings and self-accusations mount, causing anxiety and depression. The anxiety brings to the fore the previously compensated pathological potentials of the personality organization. Oversensitivity, phobic reactions, or paranoid projections develop in the struggle to maintain the self. The process may lead to full-blown psychosis.

Summarizing the factors that cause serious psychopathology, one may generalize that severe psychiatric conditions occur in those individuals whose adaptation to internal and external stress occurred throughout their life at a cost of increased narcissistic defenses. The endocrine imbalance and the accompanying autonomic symptoms are precipitating agents; the causes of psychiatric symptoms are deeply embedded in the psychic organization. This is indicated by the fact that endocrine therapy affects the autonomic nervous system reactions and not the psychiatric symptoms.

Many women go through climacterium without any psychiatric disturbance, and then later develop more or less severe depression when physical or psychological manifestations of aging, especially in the area most significant to the individual, bring about a fear of helplessness and intensify defensive processes, as described above, even without endocrine imbalance.

Every single phase of life involves a shifting and reorganization of

psychic structures in accordance with the supply of vital energies. As they decline the vector of psychic and somatic processes changes. The giving and expansive attitudes needed for the procreative period become outweighed, step by step, by the restricting, self-centered tendencies characteristic of old age. Yet this, too, is the result of the adaptive function of the ego, which tends to maintain the individual as she knew herself, as she used to be—to the last.

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Notes

- [1] There are signs indicating the ways by which the estrus disappeared through the ages. Apes and monkeys are known to indulge in sexual intercourse in which they cannot be fertilized. Menstruation is not a distinction of the human female only, since menstruation occurs in all species of apes and in some kinds of monkeys, governed by the regularly alternating secretion of hormones.
- [2] For more detailed literature on the inductor theory of primary sexual differentiation, see Sherfey.
- [3] Customs and rites surrounding the menstruating woman in different civilizations may indicate, however, man's fear of her. Blood coming from the female body may activate the dread of castration in men.
- [4] The opposite seems to be true in many instances. Women, even young girls, who have not had sexual relations, may have normal sexual appetite and enjoy heterosexual coitus even after total extirpation of the ovaries and uterus. This is evidence of the central organization of sexuality, independent of the gonads.
- [5] These are the processes that Mahler termed "individuation."
- [6] Westoff and Kiser probably expressed the same idea: "The woman's ability to conceive would depend on the psychosomatic balances both within and between the would-be parents" (p. 421).
- [7] In psychoanalysis the term "frustration" implies that the drive is thwarted in attaining its goal. Thus frustration may be the result of external or of internal prohibitions of the superego that exclude the instinctual need from gratification.