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## Hildegard's Medicine: A Systematic Science of Medieval Europe

by

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#### Abstract

The modern view of the Middle Ages is largely paternalistic, with a general understanding that 'thought' essentially died during these so-called "Dark Ages". Recently, however, a post-modern desire to pursue a more holistic view of life has rediscovered the Middle Ages as a source of understanding the world, including medicine, in a holistic light.

Leading from the rise of feminism, studies into women's lives and work in the medieval period reveals a more complex picture of how women contributed to the development of a holistic medicine than previously considered. A study of Hildegard of Bingen's life, her influences and her contributions to medical thought demonstrates that women were active in the medical community and developed new concepts.

To call Hildegard productive would be a serious understatement. Over her lifetime she wrote over eight book-long texts and seventy Gregorian chants, as well as creating musical dramas and a secret language and script. Her medical work, *Causae et curae*, synthesizes ancient Greek medical ideas with Germanic folk lore to produce a text unique to her time. Not simply a regurgitation of these separate traditions, Hildegard's work represents a holistic systematization of knowledge involving complex thought and understanding.

#### Introduction

The modern view of the Middle Ages is largely paternalistic. The Enlightenment idea of progress incorporated into it the concept that "thought" essentially died during the "Dark Ages," as we have come to call it. The glory and power of the Roman Empire dissolved into fragments, as Edward Gibbon famously blames on "Christianity and Barbarians," and these fragments were preserved as relics with no significant progress or adaptation.

With the fall of Enlightenment and the post-modern desire for a more holistic view of life, the Middle Ages have been "rediscovered" by scholars as a source of understanding the world, and even medicine, in a holistic light. As well, the rise of feminism has lead to new studies into women's lives and work in the medieval period. Both these driving forces have lead to a new understanding of how women of the Middle Ages were perceived and how they perceived themselves, their bodies, their health, and the world around them.

Two of the most prominent examples of medical women in the Middle Ages are Trotula of Salerno (ca. 1097-na) and Hildegard of Bingen (1098-1179). While Trotula represents someone within the traditional school of medical thought, Hildegard's medicine is sometimes considered an anomaly when compared to her other

accomplishments. However, by surveying Hildegard's life and works, particularly her views on *viriditas*, we can gain a better understanding of women's practice in the early medieval period and the systematic view of nature and medicine developed by Hildegard.

# Hildegard of Bingen's Life

Hildegard of Bingen was born in the rural Rhineland in 1098, and died in 1179 (6). As the tenth child she was predestined by her religious parents to be a tithe to the church (6). She entered the double monastery of Disibodenberg at the age of fourteen, under the leadership and teaching of the *magistra* Jutta (1092-1136). Under Jutta, there are good reasons to believe she was the infirmarian or medical practitioner, for the females at the monastery (7). After Jutta's death in 1136, Hildegard was elected *magistra* and continued to lead the nuns at Disibodenberg until 1148 when, due to a vision, she decided to leave Disibodenberg with the nuns and setup a new monastery outside Rupertsberg at Bingen on the Rhine. These events are often linked to the writing of her primary medical text, *Causae et curae*, since she could no longer act as infirmarian and the new infirmarian would be left without the knowledge at Disibodenberg. The Rupertsberg monastery remained her home until September 17<sup>th</sup>, 1179, when she died in her sleep at the age of eighty-one.

To call Hildegard productive would be a serious understatement: Over her lifetime, she wrote three books on her visions, several biblical commentaries, two biographies, and a medical and a natural-scientific text; composed more than seventy Gregorian chants and two musical dramas; and created a secret language and script (6). The approval of her initial book of visions, Scivias, by Pope Eugene III. (na-1153) in 1147 led to a series of visits and correspondences throughout the medieval world with individuals such as (1154-1189), II of England Louis VII of France (1120-1180), Frederick I. Barbarossa (1122-1190), or the young Agnes of France (1171-1204) (6). She was invited to preach in the major cathedrals of many nearby cities, including Mainz, Cologne, and Worms. Near the end of her life, she had gained a reputation such that she was able to defy the Pope in her 80<sup>th</sup> year and have the Pope relent first (7).

Hildegard's fame in modern times has mainly arisen through her theological writings and musical compositions. Her medical works have been rather ignored, or even attributed to others. Recently, however, scholars have come to see her medical works as intimated connected with her theology and view of the world.

## Hildegard's Medicine

In order to pursue a further study of Hildegard's medicine, we need to step back and survey the trends of 12<sup>th</sup> century Europe and the potential sources of influence on her writing and thought. Focusing our study on medicine, there are two important questions. Firstly, what were the positions of female practitioners during this time and their scope of practice? Secondly, what were the sources of medical knowledge and in what form were they available to Hildegard? A brief analysis of these questions will enable us to better understand Hildegard.

Medical practice and education in the 12<sup>th</sup> Century could best be described as lacking demarcation and organization. The advent of universities in Western Europe in the 13<sup>th</sup> to 14<sup>th</sup> centuries corresponded with increasing formalization of the medical trade and establishment of hospitals (5). The medical education at Salerno is a notable exception to this (circa 1100); therefore, the university educated physician was the exception rather than the rule in Hildegard's time. The primary practitioners during this time would be either trained in a monastery as an infirmarian or through the folk herb lore tradition.

Interestingly, the formalization of medical education into universities and away from monasteries and folk tradition has been linked to the separation of women from the trade (4). This makes sense when one considers that often the inferior view of women was not merely due to a dominant male clergy. Rather, it was "also the medical and scientific assumptions of the ancient world that were incorporated into medieval thinking with but little challenge". (1) In fact, Christianity even "offered a positive antidote for some of this 'scientific' misogynism by insisting that women were also God's creatures" (1). When medicine moved from the monastery to the university, where ancient knowledge was praised above all, the exclusion of women seems a logical progression. Therefore Hildegard's appearance during the 12<sup>th</sup> century instead of a century later is particularly notable.

The position of the female practitioner in early medieval Europe is vague, though it is assumed by many accounts that the primary scope of practice for medical women was other women (5). Women medical practitioners are also often assumed to be the equivalent of midwifes. As Monica Green points out, however, "these assumptions are enticing in their simplicity, yet it is astounding how little historical evidence has been brought forth to substantiate them" (4). The practice of medieval medicine was often more complex, with women practicing on men and vice versa. Although Hildegard's medicine reveals a deep understanding of woman's physiology unattained by many males during her time, we must keep in mind that Hildegard's scope of practice was probably not reduced to simply females.

#### Causae et Curae

Hildegard is unique amongst the female practitioners of her time, however, for the fact that she developed a systematic, scientific, and holistic understanding of medicine and the world that rivaled any being produced at Salerno at the time without ever receiving a "formal" medical education. This leads to the question of the source of her knowledge. Four major sources are indicated by the language and knowledge of her medical text *Causae et curae*.

Firstly, one must acknowledge the biblical source that framed her worldview of disease, health, and life (6). Causae et curae, like her theological works, is framed by a Christian worldview. However, the cures offered in the work are not purely spiritual: they are real, substantial actions involving the physical body (6). Even her theological works are tied to the physical. In Scivias, an image is given of the world as womb or vagina (7). Hildegard also uses the menses as a metaphor to describe the birth of Jesus (7). She did not seem regard there being dualistic animosity between the spiritual and the physical, faith and science. As Elisabeth Goessmann states: "in Hildegard, scientia and fidas are transferred to cosmic scenery and appear in a macro-microcosmic

correspondence where they mutually influence each other" (3). Therefore, Hildegard's Christian worldview was holistic.

The next source of information that must be considered is that of the ancient world, the Latin sources. Often in monasteries, the ancient sources such as Hippocrates', Galen's, and Pendanius Dioscorides' (ca. 40 to ca. 90 AD) writings were compiled in various forms into a single volume or multi-volume encyclopedias of medical knowledge that were often kept in the infirmary (7). Also, the tradition of sharing knowledge between monasteries meant that Hildegard could have access to more texts, or different versions, if she so desired (7). An analysis of *Causae et curae* demonstrates that Hildegard used the theoretical knowledge of the Greco-Roman tradition (6, 7).

A third source for Hildegard would have been the practical medicine she learned in the monastery as an infirmarian. At Disibodenberg, she probably would have trained under a monk in the caring of patients (*i.e.*, nursing, diagnosis, prognosis, treatment) and in preparing medicines (7). In terms of the preparation of medicines, the infirmarian would also tend a monastic garden and be expected to know the growth cycle and proper storage of herbs (6). As Hildegard herself describes it, the infirmarian was the *pigmentarius*, one knowledgeable about "*pigmenta*, that is, spices and medicinally active herbs" (7).

This leads into the final source of Hildegard's knowledge, which would be that of the rural agricultural tradition in Germany. This is indicated by the use of many "German words for plants whose Latin names [Hildegard] apparently does not know, suggesting that she learned their use orally and from vernacular tradition" (6). Directions and measurements are often given in the fashion of a domestic cook instead of an educated professional (6). Hildegard regarded and used the information provided by the folk culture surrounding her.

## Conclusion

In conclusion, Hildegard enjoyed a wider scope of practice then the following centuries would provide women and used her position in the monastery to gather a wide variety of sources. By analyzing how Hildegard combines these sources in one comprehensive text, we can see that Hildegard does not simply regurgitate this knowledge. Instead, she synthesizes a systematic view of nature and medicine that is unique. This is represented in her concept of *viriditas*.

Hildegard gives a special position to *viriditas* in her writings. *Viriditas* can be translated as "greenness", "freshness", "virgin", or even "raw" (7). In the ancient tradition, *viriditas* was viewed as the greening power of plants, in contrast to the *anima* of animals and humans (7). It was an immaterial greening force. Hildegard, however, expands the humoral theory of Galen and Hippocrates to include *viriditas* as the green, or raw, humor (7). This raw humor has the power to become the four humors, thereby connecting the effects of herbs to the body (7).

In addition, Hildegard saw *viriditas* as force and humor at work in the human body, not simply plants. It was the humor of fertility and vigor. Hildegaard describes fertility and *viriditas* in the female body as follows:

The menstrual flow of a woman is her generating viriditas, her flowering, because, just like a tree by its viriditas produces flowers and leaves and fruits, so a woman by the viriditas of menstruation brings forth flowers and leaves as the fruit of her womb.

(Transl. from Causae et Curae, in: 7)

She applies the same concept to the man body as well, speaking of a 'virile viriditas' located in the testicles (7). In terms of vigor, Hildegard links baldness to *viriditas*:

Once a man is bald, no medicine can help because both the moisture and the viriditas that were in the skin of the scalp have dried up, and can never come back, whence the hair cannot regrow.

(Transl. from Causae et Curae, in: 7)

*Viriditas* here is clearly seen as a physical substance, a humor that can dry up. This view is consistent with her understanding of the *viriditas* of plants, where the *viriditas* in plants moves and changes in quantity and quality as the season's progress (7). Therefore, Hildegard develops a new conception of *viriditas* and its purpose in nature and medicine.

The strong thought-continuum developed by Hildegard between nature and human medicine through *viriditas* demonstrates an incorporation of the agricultural folk traditions and the ancient humoral theories. Hildegard uses humoral theory because it aids her in understanding the seasons and rural life in Germany surrounding her (7). She uses the agricultural tradition in medicine because it is particularity adaptable to the humoral theory; like a gardener needs to maintain the balance between soil and water, cold and heat, etc., the practitioner needs to obtain a balance of the humors (6). The sources are analyzed compared to each other, the relevant parts maintained, and new ideas formed.

Essentially, Hildegard took a variety of sources and formulated new knowledge. Her work *Causae et curae* cannot be seen simply as an attempt to make an encyclopedia of ancient knowledge; rather, it was a systematic synthesis involving many sources. Hildegard's life and work demonstrates that in the early medieval world "thought" was still an active process. She did not simply regurgitate Galen's humoral theory. She kept the relevant parts, discarded some, and introduced her own ideas. In this way, she developed a systematic science of nature and medicine.

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