

"Waiting for the Spring – Can Plants Contribute to Today's Healthcare?"

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Living as we do in a relatively wealthy society it is easy to forget that most of the World's population do not have easy access to professional health care and our prescription medicines. They have to rely on traditional medical treatments, frequently herbal remedies, using knowledge passed down from generation to generation often from mother to daughter. We also tend to draw a sharp line between "medicines" and "foods" that would also seem strange to traditional practitioners, who believe that just as some foods certainly cause us harm, others must do us "good". (Indeed, some books on Indian cookery happily discuss the diverse health benefits of the various spices employed.)

We should not, of course, be surprised that many plants contain medically "active" compounds: evolution has given them a variety of chemical defences against consumption by animals. Nor should one be surprised that intelligent observation and experience can produce effective practical action - even if it is not labelled as "science". Nature is frequently more ingenious than pharmacologists in their laboratories.

Drug companies have, of course, frequently looked at traditional remedies for new ideas but also have interests and motivations that run counter to the those of the communities that are the source of the original knowledge. They are in business to make money, and in particular to establish patents that grow strong income streams, and those are typically associated with synthetic production methods for the active compounds, with little return to the original owners of what is increasingly agreed should be regarded as intellectual property. In the current commercially driven World without a profit there is no investment that is able to bring new medical treatments to a wider community.

Even if we stay in the garden, not all is rosy. Traditional medical treatments sometimes get it wrong: having an effect is not the same as a cure - and people are always strongly inclined to attribute the alleviation of a naturally self-limiting condition to whatever way they choose to treat themselves - even if it nearly killed them. Furthermore, plants are highly variable: concentrations of the active compound may vary widely depending the precise variety grown, on how the plant was cultivated and how the crop was then stored and treated. (I do, in fact, remember the story of a gardener who did nearly kill himself by growing his own tobacco: he had managed to produce a crop that contains substantially higher levels of nicotine than the commercial product, and smoking a couple of pipes put him in hospital.) Plant species that become fashionable among the herbally inclined are also quickly over-exploited leading to poor quality and even substitution by related but less active (or occasionally dangerously overactive) varieties.

Professor Heinrich led us through the fascinating complexities of this situation with great expertise and argued that the current order of things needs to change, with a recognition that the current western approach to pharmacology will not provide long term answers to the much of World's medical needs.