

LETTER TO THE MJM

**Design:
A neglected factor in medicine**

Dear MJM,

Design has not been associated with medicine at all for years. Instead, medical technology has focused on developments from the technological point of view, whereas design of these products has been neglected. Now, this is slowly changing. More and more medical companies put their beliefs into the factor of design to improve their well engineered products. Through various design awards medical design has gained wide publicity.

Design aims to create functional and/or pleasing products. It is not just applied arts or an aesthetical factor like stylish upper-class furniture. Good design complies with function or even improves it. Design has an inventive talent; it involves problem-solving and creativity. Design adds value to a product and makes it more competitive.

But what is medical design? Medical design means introducing design into medicine and utilizing the advantages of good design to please patients. There seems to be no field in which design would be more required or helpful than in medicine. Instead of sterile ambiances or cold technological devices, design may help reduce fears and increase acceptance. It will generate more user-friendly products, in some cases demonstrating function by the form. Medical design has a positive psychological affect and helps to improve patient-doctor relationships. Patients feel more comfortable finally leading to better results in health care outcomes.

Therefore, the Philips Company has developed the idea of *Ambient Experience Design* aiming to combine technology and design to establish high quality comfort in hospitals. This concept has been introduced at the Lutheran Hospital in Chicago. The CT scanner rooms have been equipped with smoothly shaped diagnostic apparatus. Furthermore, pictures of relaxing subjects for adults or cartoons for children have been projected onto the walls to make comfortable surroundings. This concept resulted in patients who were happier and less afraid, and a medical staff that felt more comfortable.

Another example are hip protectors, developed to protect against hip fractures resulting from falls. However, currently the compliance with such devices is low. The AHIP Protectors from Astrotech Advanced Materials were designed to cope with patients' needs. It is a design product developed in co-operation with patients, medical doctors, material scientists and industrial designers. Its design serves to please patients and improve wearing comfort and compliance by increasing flexibility and introducing air holes.

Diego a product by Gyrus, is a specially developed dissector for otorhinolaryngology surgery, which has been developed by a multidisciplinary team including designers. The heart of this tool is its hand piece which is ergonomically designed and therefore allows natural and comfortable hand positioning when performing sinusitis surgery. As a result, surgery can be carried out much quicker and with less bleeding, which is positive for both patients industrial designers. Its design serves to please patients and improve wearing comfort and compliance by increasing flexibility and introducing air holes.

As the first design products have been introduced into medical practice only recently, results of their implementation are not yet available. But if we transfer the data from other fields, where design has shown positive effects, and you can just imagine how comfortable you feel in designed surroundings, we can expect the same results with medical design. Products that please the patient more will be more successful.

In conclusion, medical design has many positive aspects, as these examples have shown. Furthermore, medical design has a lot of potential, due to medicine's broad range. So do not close your eyes to this effective factor that has been neglected for far too long.

Sincerely,

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