Application Analysis of Visual Guide System in Children's Hospital based on Emotional Dimension of Children Patients

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Abstract. Because of the development of medical and health care, the emotional needs of children are gradually paid attention to by the public. This paper analyzes and summarizes the design of excellent children's hospital guide system in foreign countries, aiming at the prominent problem that children in China are afraid to go to the hospital for treatment, proposes that the new design of guide system can alleviate and eliminate the negative emotions of children seeking medical treatment, so as to bring good medical experience to children. Theory and practice have proved that the guidance system in children's hospital should not only be functional, but also pay attention to the emotional experience of children patients.

Keywords: Children's Hospital; Guide System; Emotional Experience.

1. Overview of the Vision Guide System in Children's Hospital

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1.1 Foreign Development Status of Vision Guide System in Children's Hospitals

The visual guide system in children's hospitals also varies with the development of countries and regions. The visual guide system developed earlier in foreign countries and has developed relatively complete professional theoretical knowledge and practical approaches. Take Japan, an Asian country we are familiar with, as an example. In 1966, an independent Award for visual guide design -- Japan Logo Design Award (SDA Award) was born in Japan, which is also the only such award in Japan. In accordance with the visual guide system designed by the American AIGA graphic design agency and the international standard of public information graphic symbols, a set of detailed visual guide system was developed. The paradigm of future vision guide system design is established.

Not only in terms of practical norms, Japan also actively explored the theoretical research of visual guidance system. In 1994, in a conference, Japan proposed the idea that "on the basis of curing patients' diseases, patients' mental health and physical health are equally important", placing patients' mental health as important as physical health. It reflects the attention of Japanese designers to the world of human spirit.

Children's hospitals do not agree with ordinary hospitals. Their special physical and mental conditions require targeted observation and design by designers. Only by digging deeply into children's psychological level and spiritual needs can excellent design works be obtained. For example, the Royal Children's Hospital of Melbourne, which ranks first in Australia, not only focuses on family-centered care in its design, but is surrounded by parks with modern recreational facilities and medical equipment. It also uses warm and comfortable green colors in the design of its guidance

system, with rich and interesting pictures and wall designs. Ward names and floors are named after animals and plants. Natural wit is helpful to relieve children's anxiety in the process of hospitalization.

2. Affective Dimension Study of Children Patients

Emotion is mainly a kind of psychological experience, which is produced by emotional organs with the development of rationality and guided by social cognition and cultural value. Due to the connection between emotional and physical functions, children will be difficult to control the phenomenon of trembling and muscle contraction when they feel nervous and panic, which will affect the efficiency of medical treatment and the effect of treatment.

In the process of seeing a doctor, children will have various emotional experiences due to pain or discomfort and fear during treatment, such as anxiety, fear, loneliness, loss, sensitivity and so on. In the medical treatment process, doctors and nurses need to pay attention to the emotional changes of children, take active measures to alleviate their negative emotions, enhance their inner sense of security and trust, so as to better help children overcome the pain and promote the recovery process.

Emotion is the whole grasp of the subject to the object, is a kind of comprehensive experience produced by the interaction of various senses. It not only includes the inner activities and logical thinking process under the stimulation of external things, but also includes the emotional effect. As a spiritual force, emotion can arouse people's association, discrimination and reflection, and influence our decisions and behaviors. In his book Emotional Design, Donald A. Norman divides emotional design into three levels: instinct level, behavior level and reflection level. The instinctive level is the first reaction, which comes from the most immediate perception, including visual, tactile, auditory and other sensory experiences. In the guide system, the overall color, shape, pattern, material and so on, through the combination of these elements, directly act on people's senses and cause corresponding emotional effects. The behavior level focuses on utility, performance and availability, such as the information function of the guide system and the ease of use in the interaction mode. Ease of use is the most closely combined with the user, when people in the process of using the guide, confused by its function, will produce negative emotions. The reflective level is the highest level of emotional experience, which is the product of deep thinking of the brain. On the basis of the role of the first two layers, the inner experiences, experiences and emotions are stimulated by thinking about the meaning of tangible objects. The three levels interweave together, regulate each other, interact with each other, from the physical experience to the psychological experience. Starting from the three levels of emotion, we can design a reasonable visual guide system for children's learning space more scientifically.

3. Design and Application of Hospital Visual Guide System under the Emotional Dimension of Children Patients

3.1 Soft Color Application

Use bright colors and follow the rules of moderation. The sensory function of preschool children is gradually improving with the growth of age, and the development of visual perception has a huge impact on the psychological development of children. In the kindergarten environment, color is the most sensitive visual information symbol to visual stimulation. The use of color tones to distinguish different Spaces can not only beautify the environment, but also build spatial orientation for children. Children usually like bright colors, should be combined with children's curious psychological characteristics of color, appropriate color collocation to stimulate children's imagination, trigger children's attention to the environment and good impression, promote children's cognitive and emotional development. It is worth noting that the kindergarten is not in essence an amusement park, in the color design of the guide system, should follow the principle of moderation, considering the size of the area in the space, and building lighting, the environment of the overall color match is

harmonious, and the function of the attributes of the partition, to avoid the abuse of color caused by children in a certain area stay too long, the act of producing hyperarousal.

3.2 Interesting Appearance Application

Graphic design is general and fun. In graphic cognition, preschool children only master the basic geometric figures, such as circle, square, triangle, and so on, do not have the ability to independently identify complex figures. If the graphic in the kindergarten guide system is overly complex and abstract, it will increase the time cost of children's information reading, resulting in negative emotions of confusion and anxiety. First of all, in the design, it is appropriate to use interesting and vivid symbols and graphics to enhance the transmission of guiding information, which can not only attract the attention of children, but also bring diversified emotional experience for them. Secondly, preschool children's thinking with a great deal of concrete figurative, the understanding of things is not deep, so it must be simple to understand, highlight the key points, avoid causing the wrong information interpretation

3.3 Application of Safety Materials

Use natural materials with emotional temperatures. American advocate for children, Charles D. Love once proposed that "if children are isolated from the natural environment for a long time and do not contact nature, then his perceptual ability will be affected, prone to produce angry emotions." Contact with nature can promote the preliminary development of preschool children's self-awareness and character. Children can understand the world correctly from observing the process of natural changes, contact with plants, animals, soil, water and other fresh and mild natural elements, which can cultivate their correct view of natural ecology. Children aged 3 to 6 years old gradually enhance their physical coordination ability, like to perceive the world with the touch of the hand, easy to be attracted by novel things outside and change their mental activities and behaviors, seriously lack the ability to think independently and self-protection awareness. In the visual guide design, avoid sharp corners, hard and unfriendly metal materials, soft, safe and natural materials should be used as much as possible. For example, the essential characteristics of symbols are retained in the guide design, and plants full of life and fun are embedded, so that children can interact with the guide when they obtain the information of knowing the way, observe or touch the plants in the guide, and generate close and warm emotional experience.

3.4 Use of Warm Content

At the age of 3 to 5, children are in the rapid development of oral expression, but their cognition of words is in the embryonic stage, and it is difficult to recognize too many words. In the design, can be combined by Chinese characters and pinyin design, as far as possible to control the number of words and the degree of difficulty of word discrimination, do not leave the children's recognition range. In the expression of spatial information, try to use plane graphics to refer to content information, avoid using overly complex and abstract graphics. Such as indicating the direction of the arrow symbol, simple to understand. During the design, the symbol can be changed in color or form, which not only meets the requirements of guiding function, but also creates an interesting atmosphere. Help children break down the barriers of age, language and culture, access to guidance information in a relaxed atmosphere.

4. Conclusion

In the design of the visual guide system of children's hospital, the author puts people first, deeply analyzes the emotional needs of children, takes the emotional dimension of children as the fulcrum, infuses the elements of emotional design, expands the method of children's emotional design, and improves the design status of the visual guide system of Chinese children's hospital, so as to eliminate the good emotions of children patients in the process of seeking medical treatment and improve the

medical environment of the hospital. To promote the hospital brand effect, and finally improve the medical level of the children, to provide a new paradigm for the design and study of the vision guide system in children's hospitals.

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