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Paediatric Surgery at the Museum of the Medical University

**ABSTRACT** 

The paper discusses the preparation of an exhibition devoted to paediatric surgery at the Medical University. It is a relatively young medical specialisation, practiced by a rather limited group of medical professionals. Knowledge on this subject is also limited, even among health care specialists.

The paper provides the most important information on paediatric surgery and attempts to identify target visitor groups and issues which may be of interest for them. The various expectations and areas of particular interest have been indicated, depending on age, education and reasons for visiting the museum. The paper is an introduction to further discussion on the development, and on how to display the collection at the museum of the Medical University.

Key words: history of medicine, museum exhibition, Jan Eustachy Kossakowski

### Introduction

Creating new museums and collections for universities, departments, clinics or hospitals can be relatively easy. Such exhibitions should have specific locations that provide the conditions for obtaining new buildings, creating archives, as well as establishing direct contact with people connected with the development and functioning of universities.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> Exhibition: *Unrepeatable* presented at the Museum of Medical University of Gdansk on the occasion of the university name change in 2009.

The sense of identity with the university or city in which an exhibition functions allows it to address a specific audience. Moreover, it facilitates gaining interesting exhibit items by means of donations and deposits from private family collections and archives.

University museums are not only limited to presenting the academic history of medicine. They also host exhibitions connected to the professional activity of outstanding medical figures, those devoted to particular diseases and epidemics decimating populations, or medical specialisations.<sup>2</sup> Some of them, such as obstetrics, gynaecology, surgery, paediatrics, internal medicine and psychiatry constitute a great subject for exhibitions. This is mainly due to their popularity among both patients and doctors. It is relatively easy to gather and select the most interesting items connected to these specialisations.

This is, however, different in the case of the less popular specialisations, as knowledge about them is very superficial, even among health care professionals. Even though, from time to time they do draw our attention (usually because of a spectacular discovery or breakthrough in the treatment of a dangerous disease), they usually remain overshadowed by more popular specialisations. This brings us to the question: How to prepare a university museum exhibition devoted to one of the less popular specialisations?

# Paediatric surgery

Paediatric Surgery is definitely one these, and is a relatively new field of medicine. Its dynamic development took place after the Second World War, and the spread of Minimally Invasive Surgery (MIS) has occurred within the last decade, leading to significant progress in the treatment of surgical childhood diseases. Paediatric surgery focuses mainly on the treatment of respiratory, digestive and urinary systems, malformations, injuries and burns occurring in the neonatal period, as well as paediatric oncology, among many others. The range of this specialisation is very wide, and discussing it in detail falls far beyond the scope of this article. However, it is necessary to point out that in many countries there are special centres which have been created for the treatment of children, which have special surgical units dedicated for children. This allows for the gathering of groups of consultants of all paediatric specialisations in one place, creating the optimal conditions for surgical treatment. Even though such centres exist, the scope of interest and professional activity is not well known to most lay people or even doctors.

There are about 400 professionally active paediatric surgeons in Poland. From the point of view of the history of science and especially medicine, it is worth noting the following facts: the progress of paediatric surgery reflects the progress of science in gen-

<sup>&</sup>lt;sup>2</sup> Exhibition: *Almost the entire twentieth century. The life and work of Tadeusz Kielanowski* presented at the Museum of the Medical University of Gdansk and the Museum of the History of Medicine and Pharmacy, Medical University of Bialystok. Author of the exhibition Dr Jacek Halasz, Department of History and Philosophy of Medical Sciences, the Medical University of Gdansk.

<sup>&</sup>lt;sup>3</sup> Koop C. E. (1993), "Pediatric Surgery: The Long Road to Recognition", *Pediatrics*, 92, 4, pp. 618-621.

<sup>&</sup>lt;sup>4</sup> Ziegler M.M. (2004), "Pediatric Surgical Training: An Historic Perspective a Formula of Change", *Journal of Pediatric Surgery*, 2004, 39, 8, pp. 1159-1172.

eral, most noticeably within the last twenty to thirty years.<sup>5</sup> This recent period of time is relatively short, making it possible for surgeons who were working at that time to be still professionally active, or perhaps in the process of retiring. Thanks to this, we can include their personal memories and reflections in the items of the museum exhibition archive. What is more, this short time distance makes gathering a representative collection of exhibits much easier.

### The exhibition

Thus, the fundamental question is the following: How to turn the fascinating history of paediatric surgery into a fascinating exhibition about paediatric surgery? Only the most meaningful and attractive exhibitions should be used to properly illustrate the history of paediatric surgery. However, before we do this, it is necessary to decide who is actually going to see the exhibition. Finally, we have to select particular exhibits and curate the exhibition so that the goal of presenting the history of paediatric surgery in an interesting, substantial way is achieved.

It can be presumed that the target audience will mainly consist of people with a connection to the university: medical students, retired doctors, students of primary and high schools (schools are eager to organise school trips and classes in university museums), casual guests and, naturally, paediatric surgeons. Each of these groups would come to see the exhibition for different reasons. Students of medicine would probably look for useful information helping them to decide on their future specialisation: a younger audience would soon have to decide on their further education and future profession, so the exhibition might familiarise them with the world of medicine. Sometimes a visit to a museum is also treated as a break in the routine of school lessons. Casual guests constitute the most diversified and vague group of all of the above. Their motives and expectations are not easy to specify. The three groups mentioned above share one feature: an eagerness to learn something unique and extraordinary. A museum is always associated with a presentation of something remarkable and shocking. For retired doctors, a museum visit may be a sentimental journey to the times of their youth, frequently made in the company of their children or grandchildren. Paediatric surgeons obviously have the most emotional attitude to the exhibition, since it illustrates both the story of their professional life and themselves. The photographs will perhaps depict them or their friends; they would have perhaps used some of the exhibits in their professional careers. Equally, surgical tools and other medical devices seen at a museum, in a different context, would evoke strong emotions.

When deciding on the exhibition content, one has to be aware of the fact that each of the above-mentioned groups will have different perceptions of the material. The interest of the doctors at the exhibition will go far beyond just a simple craving for knowledge. There are several examples below illustrating the possible interpretations of the exhibition items. In 1946, Professor Jan Eustachy Kossakowski, the father of Polish

<sup>&</sup>lt;sup>5</sup> Smólska I., Dziak A. (1989), "Historia chirurgii dziecięcej w Polsce", *Archiwum Historii i Filozofii Medycny*, 52, 2-1, p. 293-307.

paediatric surgery, published a book entitled *Indications for Surgical Treatment in Ne-onates and Infants*. At that time, anaesthesiology, especially paediatrics, was at an early stage of development. These events are described in the book in the following way: "... But the most important argument against anaesthesia in the first days of life is that it is usually unnecessary, as I can tell from observations based on more than 400 operations performed in the first days after birth. As I have already stated above, I often performed extensive, long-term operations, without using any anaesthesia and I have never found, even in the child's behaviour during the procedure or in the postoperative period, any disturbances which could be attributed to a lack of anaesthesia. The behaviour of infants during the cutting of the skin and the deeper tissues, at the time of cutting the nerve fibres and in such moments as the opening of the peritoneum and intestinal extraction did not differ at all from an interruption of an operation, or the pre-op period."

This statement provokes reflection, for various reasons. The youngest readers will find it difficult to imagine surgical operations performed without anaesthesia or specialised devices such as respirators, monitors, etc., and most importantly, the fact that the patient had to suffer such pain. Experienced doctors, however, may well be reminded of times in their studies and at the beginning of their professional work, and have a completely different reaction. Similar reactions of disbelief and astonishment on the one hand, and nostalgia on the other, may be provoked by other anaesthesiological items: the Ombredanne Inhaler (a simple device used for anaesthesiological drug administration), the KIFA respirator, with its hand-cranked emergency power generator, etc.

Minimally Invasive Surgery (MIS) is a recognised standard of conduct in the management of many diseases. The most dynamic development of this technique has taken place during the last twenty years. However, the first attempts to create prototypes of laparoscopes had already appeared in the 19th century. This fact, perfectly illustrating the influence of technological development on the development of medicine, may be of interest to all museum visitors, especially if placed in the historical context. The invention of the light bulb enabled people to improve laparoscopes by intensifying the light falling into the oral cavity and so improving the quality of the examination. Another important step in the development of Minimally Invasive Surgery was the introduction of the Veress needle in 1938. It allowed for the safer insertion of the laparoscope into the abdominal or pleural cavity. Understanding the significance of this invention requires specialised knowledge, and would not be appreciated by visitors lacking deep medical knowledge (even students of medicine who have just begun their studies or those not interested in surgery). It should be pointed out here that the presentation of Minimally Invasive Surgery without mentioning both milestones described above would be incomplete.

All exhibition items dating back to after 1945 could be presented in the context of popular culture. This would allow the youngest members of the audience to compare the development of medicine with specific facts from the history of pop music or film. Filling the exhibition with information about world history would give a wonderful opportunity to teach young students and remind the older ones about the past times of their youth.

<sup>&</sup>lt;sup>6</sup> J. E. Kossakowski, *Wskazania do zabiegów operacyjnych u noworodków i niemowląt*, Lekarski Instytut Naukowo-Wydawniczy, Warszawa, 1949, p. 62.

## **Conclusions**

While preparing an exhibition devoted to even a small fragment of the history of medicine, one has to take the following aspects into consideration:

- each group of visitors has different expectations,
- it is impossible to prepare a totally universal exhibition,
- gathering items in one place can be beneficial for the content of the exhibition
- some spectators will dislike the show.

Despite these obstacles, the most important should be the sentence placed on the cover of the file containing the archive of the Section of Urology of the Polish Association of Paediatric Surgeons (so inextricably linked with the theme of the exhibition):

DO NOT DESTROY THE HISTORY OF THE SECTION!7



Archive of Section of Urology of the Polish Association of Paediatric Surgeons. File, hard cover, property of author.