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RESEARCH ARTICLE

TRANSITION IN ENDOCRINOLOGY: WHAT MOROCCAN ENDOCRINOLOGISTS AND PEDIATRICIANS THINK?

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Abstract

Background: Transition is defined as the transfer of a patient from a child to an adult structure. Our study aimed to describe and compare the state of knowledge of endocrinologists and pediatricians about the transition period.

Methods: This was a prospective cross-sectional study conducted during July 2020. We made two questionnaires. We compared the two groups in terms of: practice area, hospital activity and definition of transition, age of transition in routine practice among endocrinologists and pediatricians, and the existence or not of a transition consultation at the practice area.

Results: Sixty percent of endocrinologists received patients referred by pediatricians between the ages of 15 and 18 years old, 20% received patients between the ages of 10 and 15 years old and 20% after 18 years old. The mean age of transition was between 15 and 18 years, according to 67.6% of pediatricians, after 18 years old for 29.4% of pediatricians and between 10 and 15 years old for 2.9% of them. Endocrinologists and pediatricians were comparable in terms of practice area, hospital activity, definition of transition age, the existence of a transition consultation, and also in terms of transition-age in current practice. We found a statistically significant difference in terms of practice area between endocrinologists and pediatricians (p-value: 0.025).

Conclusion: Our study highlighted the importance of specific support to facilitate the transfer from pediatric to adult care for young patients.

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Introduction:-

Transition is defined as an active process that addresses the medical, psychological, social, and educational needs of adolescents. It is an intentional and planned movement from child-centered to adult-centered care [1]

The timing and sequencing of this transition of care for an adolescent with illness from a family-focused pediatric model to a patient-focused adult model represents an important step in the life trajectory of these patients, including physical, psychological, and practical considerations[2].

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In endocrinology, the transition is a fundamental concept. Indeed, the preparation of this transition will allow a successful transfer from a pediatric center to an adult endocrinology center [3].

The aim of this study is to investigate difficulties and obstacles encountered by pediatricians and adult endocrinologists in their daily practices to improve and promote this transitional medicine in our country, taking into account our culture, customs, and beliefs.

Methods:-

This was a prospective cross-sectional study conducted during July 2020. We made two online questionnaires. A questionnaire for endocrinologists and a questionnaire for pediatricians practicing in Morocco. They include general questions concerning the practice area, the existence of a hospital activity, and more specific questions about the transition and its definition.

We also asked adult endocrinologists about the importance of having a formation in transition and what are the challenges they encountered with patients during the transition period.

We asked pediatricians about the transfer of their patients to adult consultations and also about reasons for the delay to establish the transfer. We request them whether the topic of sexuality should be discussed with the young patients. We used the likert scale in this questionnaire [4].

Ethics:

Data confidentiality was maintained at all stages of the study respecting Helsinki's ethics charter. We provided all the doctors who answered to the questionnaire informations about the study and obtained oral consent from all of them before inclusion.

Statistical analysis:

Quantitative data are expressed as the median and interquartile range (IQR) for variables with abnormal distribution, and as means and standard deviation when the distribution is normal.

Results were collected on excel and analyzed on JAMOVI version 1.6.23.0 (16).

We then compared the views of endocrinologists and pediatricians in terms of area of activity, hospital activity practice, the definition of transition age. We also compared the age of transition in routine practice among endocrinologists and pediatricians and the existence or not of a transition consultation. We used the Khi 2 test. We considered the significance of the results from a p-value lower than 0.05.

Results:-

We collected 74 responses.

Forty endocrinologists were interviewed. 77.5% practiced in the public sector and 22.5% in the private sector. 90% of the endocrinologists worked in hospitals and 10% didn't have a hospital activity.

A transition follow-up existed in the structure where 67.5% of the endocrinologist's practiced and 32.5% declared that there was no transition follow-up.

Sixty percent of the endocrinologists defined the age of transition between 15 and 18 years, 32.5% of them defined it between 10 and 15 years and 7.5 % after 18 years.

The best time to establish the transfer would be when the adolescent is ready according to 55% of the endocrinologists, 22.5% thought that the best time is at puberty and 25% during the crossing from middle school to high school.

Sixty percent of endocrinologists received patients referred by pediatricians between the ages of 15 and 18 years, 20% between 10 and 15 years and 20% of them received patients after 18 years.

Finally, 82.5% of endocrinologists felt that transitional training was mandatory and 17.5% of them didn't think that is mandatory.

We interviewed 34 pediatricians, 55.9% of whom were in the public sector and 44.1% in the private sector. 76.5% of the pediatricians replied that they had hospital activity and 23.5% didn't have a hospital activity. A transition consultation existed in the structure where 28.2% of the pediatrician's practice and 61.8% of pediatricians didn't have a transition follow-up in the structure. The age of transition was between 15 and 18 years, according to 67.6% of pediatricians, between 10 and 15 years for 2.9% of them and for 29.4% after 18 years.

Fifty percent of the pediatricians said they never referred their patients to a transition consultation, 44.1% did it rarely and 5.3% referred their patients often.

67.6% of pediatricians referred their patients to adult consultations between the ages of 15 and 18, 2.9% of them referred patients between 10 and 15 years and for 29.4% of pediatricians after 18 years.

This transition period was feared by adolescents according to 94.1% of pediatricians and 5.9% reported that adolescents patients were not afraid of this transition period.

We also noted that 79.4% of pediatricians said that the parents were reticent about this transition, with a fear of being left out and 20.6% of them said that the parents were not reticent.

73.5% of pediatricians believed that there are few obstacles related to the pathology itself.

Age was not a good indicator for starting the transition accordingly to 82.4% of pediatricians and 17.6% of them found that age was a good indicator for the transition.

Talking about independence with the young patients according to 85.3% of pediatricians could facilitate the transition, and 14.7% of them didn't think that it could facilitate the transfer.

Endocrinologists and pediatricians were comparable in terms of hospital activity, definition of transition age, the existence of a transition consultation, and also in terms of transition-age in current practice.

We found a statistically significant difference in terms of sector of activity between the two groups; 55.9% of pediatricians were in the public sector and 44.1% of them in the private sector while 77.5% of endocrinologists practiced in the public sector and 22.5% of them in the private sector (p-value: 0.025).

Discussion:-

The concept of transition has become prevalent in adolescent and young adult medicine [5] due to the increase in survival of young patients with chronic endocrine diseases in neonatology and pediatrics [6].

Through our study, we note that pediatricians and adult endocrinologists in Morocco raise several obstacles of this transition phase in their daily practice.

One of the problems raised by pediatricians is the non-existence of a transition follow-up. In fact, 61.8% of pediatricians didn't have a transition follow-up in their structure.

This issue could lead them to refer patients directly to the adult endocrinologist and may disturb the teenagers. In our study, 67.6% of pediatricians refer their patients between 15-18 years of age, which can be explained by the reason mentioned above.

There are several obstacles to a successful transition; the loss of a trusted pediatric referent to an unknown adult referent, cohabitation with adult patients at an advanced or complicated stage of the same disease, lack of communication between the pediatrician and the adult physician, or with the patient and family [7].

This transition period was feared by adolescents according to 94.1% of pediatricians, and as stated by 79.4% of pediatricians, the parents were also reticent about this transition.

This can be explained by the difference in management between pediatrics and adult doctors, since the management of a child requires the participation of the family to succeed.

Young children lack the cognitive abilities to manage a chronic illness while teenagers often lack the emotional maturity to handle the tasks of daily therapy [8].

In pediatric health care, consultations tend to be family-centered, emphasizing management approaches that fit the child's and family's lifestyle, whereas in the adult consultation, management is centered on the independent patient, who is informed and counseled, but makes his own choices about behavior or treatment.

For this purpose, it is important to make the patient aware of the possible difficulties they will face in their future life. Regular, continuous, and appropriate management will then protect them from these complications, provided that they actively participate in the management.

How this transition is undertaken is important in the life trajectory of these patients. Therefore, physical, psychological, and practical considerations will need to be included. It is the preparation of the transition that will allow for a successful transfer [1].

The transition must begin at least a year in advance involving the adolescent and his parents. Being ready for the transition implies having acquired real autonomy in managing the disease and treatments, but also knowing how to manage, how to negotiate with those around them and with caregivers, and knowing who to ask for help when needed. This gradual empowerment requires the introduction of times in the consultations when the adolescent will be seen alone, which will allow different objectives to be established according to the adolescent's needs, and thus emphasize that the patient's place changes. The adolescent becomes the central interlocutor, he can give his opinion and ask the questions he wants. Also, an introduction to the administrative aspects of the disease is necessary (management of social security, health insurance, and medical documents).

The existence of a relationship of trust between the pediatric team and the adult team is necessary. A shared staff to discuss about cases of transition could help the caregivers according to 95% of endocrinologists. Also, 64.7% of pediatricians think that a shared first follow-up could be helpful for a good transition.

Unfortunately, it is materially difficult to achieve, especially when the pediatric and adult follow-up sites are geographically distant.

We could create mixed teams of pediatric and adult professionals and decompartmentalize the health system or use revolutionary technological tools like telemedicine which could be a solution to this logistical problem by establishing medical meetings to present the records of patients in the transition phase and to stay up to date with the recommendations of learned societies [9].

In parallel to the preparation in pediatrics, the reception in the adult department must be optimized to be successful [10]. Continuity with pediatric care must be maintained during the initial consultations.

In addition, caregivers in the adult unit must discuss with these patients the subjects that are of particular concern to them, studies, social relationships, and sexuality, without forgetting risky behaviors [11]. In fact, in our study, 85.3% of pediatricians think that talking about independence with the young patients could facilitate this transition.

The introduction of discussion groups could be a stimulating and motivating approach for young people, as well as the digitization of communication using adapted platforms to improve the quality of care.

Finally, the transition is an entity ultra-specialized requiring a specialized medical background that begins early in the paediatric centre, to prepare for life as an adult [12].

Indeed, in our study, more than 80% of endocrinologists confirm the importance of a training in transition medicine and this is consistent with the literature [13].

Conclusion:-

The transition represents a crucial stage in the life of our young chronic patients.

Following the example of this work and as suggested by numerous studies, it would be wise to put in place specific and adapted support to facilitate the transfer from pediatric to adult care for our young patients.

There are no recommendations regarding a possible ideal age of transition.

Although we suggest that the transfer could be facilitated by joint consultation between endocrinologist and pediatrician or by a joint staff.

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