PAEDIATRIC HEALTH SURVEY
IN ITALY
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1. INTRODUCTION

1.1 The National Health System

The Servizio Sanitario Nazionale (SSN) was instituted by the Parliament law n° 833 in December 1978 [1]. SSN includes the whole of functions, structures, services and activities which are guaranteed by the Italian State to all the Italian citizens. Its goals are the maintenance and care of the physical and psychological health and the promotion of systems of their health, according to the article 32 of the Italian Constitution. The Ministero della Salute is the main functional organ of the Italian SSN: its mission is to care for the public health.

The Italian National Health System (NHS) follows a model similar to the Beveridge model developed by the British NHS (Beveridge 1942; Musgrove 2000). Like the British NHS, healthcare coverage for the Italian population is provided and financed by the government through taxes. Universal coverage provides uniform healthcare access to citizens and is the characteristic usually considered the added value of a welfare system financed by tax revenues. Nonetheless, in Italy the strong policy of decentralization, which has been taking place since the early 1990s, has gradually shifted powers from the state to the 21 Italian regions. Consequently, the state now retains limited supervisory control and continues to have overall responsibility for the NHS in order to ensure uniform and essential levels of health services across the country. In this context, it has become essential, both for the ministry and for regions, to adopt a common performance evaluation system (PES).

The Piano sanitario nazionale is drawn by the Ministero and approved by the Parliament. It states the general objectives for the public health, the budget and the distribution of the resources to the Regions, which are responsible for the regional health activity. The main local health structure is the ASL (Azienda Sanitaria Locale). They coordinate and organize the work of all the prevention, admission, care and rehabilitation posts, offices and local services (ASL).

The Ministero della Salute more states general rules for the administration of these services, the guidelines for formation and updating of the health personnel and the systems of control and verification of the results.

1.2 Paediatric Course of Study

During the University you have to follow and pass the exam of a main course of Paediatrics, plus some others such as Paediatric surgery, Puericulture, Applied Genetics, which are optional for the most, often mandatory or warmly suggested for the future Paediatricians. For many of them practical work in children wards is mandatory.

After the degree, to be allowed to work as a Paediatrician you must attend five years of the School of specialization in Pediatrics, with five years of work in children Hospitals or Universities, regularly paid by a proper salary. At the end of this school you can work as a paediatrician. All over the nation masters and long courses in the different subspecialties (neonatology, adolescentology, rheumatology and so on) allow to sharpen your specialty according to the field you work in or you simply want to improve.

After the specialization course, it's possible to follow three pathways:
1. private activities
2. hospital activities
3. consultant for public health authority with ASL as paediatric

ECM is the way for the health professional to keep himself updated to respond to patients' needs, the needs of the health care and service to his own professional development.

The continuing medical education concerns the reception of new knowledge, skills and attitude useful for a competent and expert practice.

Is a obligation of ethics for the health professionals to practice new knowledge and competence to offer a qualitatively useful assistance. Basically, take care of their patient with update skills, without moral conflicts, in order to be a good health professional.

The start of the national program of ECM in 2002, based on DLgs 502/1992 integrated by the DLgs 229/1999 which had established a requirement of permanent formation for the health professionals, was a strong message to the health word.

The new ECM's phase contains many news and it will be an instrument to build a modern approach to development and the monitoring of individual skills.

The continuing medical education is closely linked to research in the clinical setting.

1.3 Paediatric Services

Paediatric Public Services are included in the concept of Paediatric area, which means a special approach to spaces, services and care of patients, with dedicated structures and procedures. This concept includes structures as children hospitals and children wards in general hospitals, where only paediatricians and specialized nurses are accepted. There is a children side in the family offices called consultori, scattered in the territory of most ASL, a paediatrician who works in many public kindergartens, school doctors, and there are new emerging figures, called “Community Paediatricians”. All these people have to stay in contact with the main figure to care for all children, the Pediatra di Famiglia (Family Paediatrician). This figure in conceived as the paediatrician who follows all the aspects of the physical and psychical growth from birth to adolescence. He should know the whole history of the patient and his family, care for the needs of his patients in terms of regular organized visits and checks with the possibility of ordering specialist visits and exams if needed, phone consultations, vaccinations. He is also in charge for certificates. He is supposed to be the trait d'union between the family and the second level structures.

The patients list of paediatric is combined with the available in terms of free place and choices of the citizen.

The pediatrics can be involved in projects of group or network medicine.

The ICT tools for pediatrics are compulsory caused new procedures in order to write a prescription of drugs and/or examinations.

They work together with the Director of Districts of Local Healthcare Public Authority.

The paedistrics follow the children using the health balance up 6 years and the last will be planned before the transition to general practitioner.
The activities of child Neuropsychiatrist are aimed at children and teenagers aged between 0 and 18 years. The service makes use of child psychiatrists, doctors operating within the territorial structures and/or hospital in collaboration with other institutions of the area (Social Services, School). The Child Neurology deals with the prevention, diagnosis, treatment and rehabilitation of disorders of child and adolescent development: neuromotor damage, congenital and acquired neurological diseases, epilepsy, psychiatric and behavioral problems, communication disorders and language disorders’ learning. It also deals with finding and certification (operating descriptive profile - PDF second model ICF) of disabled pupils according to national law for the special education teacher in schools activation and activation of the procedures for the recognition of civil disability and disability of minors.

2. MATERIAL AND METHOD

We have administered the questionnaire elaborated and validated by coordinator of project to health carers and paediatrics experts involved in this project by Scientific board of ASLTO3. 4 kind of questionnaires validated by European coordinator:
- questionnaire for patients
- questionnaire for relatives/parents
- questionnaire for health carers
- questionnaire for paediatrics

We are waiting the approval by Ethics Committee of ASLTO3 in order to administer the questionnaire for patients and relatives/parents.

41 health carers have been involved in survey by healthcare coordinators of Rivoli and Pinerolo Hospitals.

30 paediatrics and childhood neuropsychiatric doctor have been involved by Director of Maternal and Childhood Department of ASLTo3.

The questionnaires was administered in the following way:
- email:
- one to one meeting
- interviews

2.1 Health carers profile:

100% of health carers are females (table 1). The health carers who have been involved in this survey are:
- nurses
- paediatrics nurses
- social and healthcare workers
- midwives

41 are health carers who work in Rivoli and Pinerolo Hospitals. The most part of the health carers are over 45 (86%) (table 2).
95% of the simple employed in hospital for more than 15 years (table 3).

Table 3

2.3 Paediatricians and experts of paediatric care profiles

63% of doctors are females and 37% are males (table 1). The medical doctors involved in this survey are:

- paediatricians
- child neuropsychiatric
- neonatology
- experts in emergency care
64% are over 45 in terms of personal years and only 7% being 26-35 years (table 2).

Table 2

![Pie chart showing age distribution]

62% of the simple employed in hospital for more than 15 years (table 3) and 21% for 10-15 years.

Table 3

![Pie chart showing employment years]

57% of paediatricians experts work in hospitals (and not in the schools as mentioned in the questionnaire) of ASLTO3 (table 4).
48% of paediatricians experts attend at least 1 training course last year while 52% didn't attend any training courses (table 5).
3. RESULTS AND DISCUSSION

3.1 COMMUNICATION

Health carers results:

<table>
<thead>
<tr>
<th>Service</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Follow up information</td>
<td>4.1</td>
</tr>
<tr>
<td>Quality of patient life</td>
<td>4.4</td>
</tr>
<tr>
<td>Availability during office hours</td>
<td>3.6</td>
</tr>
<tr>
<td>Appointment for checkups</td>
<td>3.9</td>
</tr>
<tr>
<td>Support from medical team</td>
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</tr>
<tr>
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</tr>
<tr>
<td>Support to patients</td>
<td>3.7</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td>3.8</td>
</tr>
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Paediatricians results:

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</tr>
</tbody>
</table>

3.1.1 Doctor’s support to the patient

Health carers 3.7
Paediatricians 4.1

The results average of healthcare is 3.7/5.0 while the paediatricians result is 4.1, rated with a maximum of 5.0, which represents the value of the communication section by the health care staff and doctors. Both think that doctors mostly offer the kind of support the patients need, even if often they are overloaded with work for many patient but also for administrative tasks.

3.1.2 Respect in the hospital

Health carers 3.4
Paediatricians 4.0

The results average of healthcare is 3.4/5.0 while the paediatricians result is 4.0. Different evaluation can be attributed to the different kind of feedback they receive. The type of relationship between patient and healthcare/doctors is different. Health carers feel to be less respected then doctors by patients.
3.1.3 Support offered by the medical team  
Health carers 3,7  
Paediatricians 4,0  
The results average of healthcare is 3,7/5.0 while the paediatricians result is 4.0.  
Doctors feel more supported by the medical staff than health carers feel. Health carers feel a major load of work to carry on.

3.1.4 Quality of the patient’s life  
Health carers 4,4  
Paediatricians 3,7  
The results average of healthcare is 4,4/5.0 while the paediatricians result is 3,7.  
Health carers evaluated their patients’ quality of life better than doctors do. Doctors recognize how the hospital conditions are far from the necessities of patients, especially of children.

3.1.5 Doctor's availability  
Health carers 3,6  
Paediatricians 4  
The results average of healthcare is 3,6/5.0 while the paediatricians result is 4,0.  
Doctors feel that it is mostly easy for patients to speak with them during the office hours, while health carers find this more difficult.

3.1.6 Making appointment for check-ups  
Health carers 3,9  
Paediatricians 3,7  
The results average of healthcare is 3,9/5.0 while the paediatricians result is 3,7.  
Doctors’ and health carers's availability results “mostly available”: it’s due to wait for appointment and not always easy access to care.

3.1.7 Follow-up information  
Health carers 4,1  
Paediatricians 3,7  
The results average of healthcare is 4,1/5.0 while the paediatricians result is 3,7.  
Health carers shows a better feeling to obtain follow up information than doctors.
### 3.2 TRANSPARENCY

#### Health carers

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Written communication</td>
<td>3.8</td>
</tr>
<tr>
<td>Privacy</td>
<td>3.8</td>
</tr>
<tr>
<td>Information about test results</td>
<td>4.4</td>
</tr>
<tr>
<td>Information about care</td>
<td>4.5</td>
</tr>
<tr>
<td>Information to patients</td>
<td>4.1</td>
</tr>
<tr>
<td>Patients’ complains</td>
<td>3.9</td>
</tr>
<tr>
<td>Other doctors’ involvement</td>
<td>3.9</td>
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<tr>
<td>Average</td>
<td>4.1</td>
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#### Paediatricians

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<td>4.3</td>
</tr>
<tr>
<td>Information about care</td>
<td>4.3</td>
</tr>
<tr>
<td>Courtesy and respect</td>
<td>4.5</td>
</tr>
<tr>
<td>Information to patients</td>
<td>4.2</td>
</tr>
<tr>
<td>Patients’ complains</td>
<td>4.0</td>
</tr>
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</tr>
<tr>
<td>Average</td>
<td>4.1</td>
</tr>
</tbody>
</table>
3.2.1 Other doctors’ involvement

Health carers 3,9  
Paediatricians 3,7  

The results average of healthcare is 3.9/5.0 while the paediatricians result is 3.7. Doctors feel to be involved less than health carers staff, even if often first contact visit need further medical examinations.

3.2.2 Patients’ complains

Health carers 3,9  
Paediatricians 4,0  

The results average of healthcare is 3.9/5.0 while the paediatricians result is 4.0. Health carers and doctors feel that doctors listen carefully to patients’ complaints most times.

3.2.3 Information to patients

Health carers 4,1  
Paediatricians 4,2  

The results average of healthcare is 4.1/5.0 while the paediatricians result is 4.2. From organisational point of view the information sharing with the parents, relatives and children is an important process of care. The average is high both health carers and paediatricians regarding to the project of care and the taking charge of case. This is a specific point of internal mission.

3.2.4 Courtesy and respect

Paediatricians 4,5  

The paediatricians result is 4.5. During the taking charge of case it’s important to guarantee courtesy and respect for relatives and children as well as colleagues (health carers and medical doctors). As healthcare professionals the courtesy and respects are two elements of organisational behaviour for each one.

3.2.5 Information about care

Health carers 4,5  
Paediatricians 4,3  

The results average of healthcare is 4.5/5.0 while the paediatricians result is 4.3. From organisational point of view the information sharing process with the parents, relatives and children is an important process of care. The average is high both health carers and paediatricians regarding to the project of care and the taking charge of case. This is a specific point of internal mission.

3.2.6 Privacy

Health carers 3,8  
Paediatricians 4,1  

The results average of healthcare is 3.8/5.0 while the paediatricians result is 4.1. The reason of the difference between health carers and paediatricians in related to the logistic structure of ward and services: we haven’t a specific room aimed to the privacy management.

3.2.7 Written communication

Health carers 3,8  
Paediatricians 3,9  

The results average of healthcare is 3.8/5.0 while the paediatricians result is 3.9. The reasons are related to the internal procedures of patients discharges according to the care continuity process. The problem is how to guarantee the continuity of information among healthcare system, relatives and children, territorial paediatricians and other institutions as schools, community services etc.
3.3 HOSPITAL ENVIRONMENT

3.3.1 Hospital's appearance
Health carers 2.4
Paediatricians 2.7

The results average of healthcare is 2.4/5.0 while the paediatricians result is 2.7. As territorial public organisation, the paediatric services are located throughout the local area. The main problem is related to the impact of territory which is very widespread on employment and on information exchange procedures. The hospitals of Rivoli and Pinerolo are old as a previous model of healthcare organisation.
3.3.2 Hospital's convenience
Health carers 3.1
Paediatricians 2.9

The results average of healthcare is 3.1/5.0 while the paediatricians result is 2.9. The hospitals of Rivoli and Pinerolo are old as a previous model of healthcare organisation.

3.4 INTERCULTURAL ISSUES

Health care

<table>
<thead>
<tr>
<th>Behaviour towards patients (action)</th>
<th>Behaviour towards patients (treatment)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.7</td>
<td>3.7</td>
</tr>
<tr>
<td>Average</td>
<td>3.2</td>
</tr>
</tbody>
</table>
3.4.1 Behaviour towards patients
Healthcare 3.7
Paediatricians 3.6
The results average of healthcare is 3.7/5.0 while the paediatricians result is 3.6. The service mission is to care the children and their parents and relatives and, in particular, to manage and to safeguard the health of the children. The health carers as well as the paediatricians are involved in the care process but they would like to “do all things”.

3.4.2 Behaviour towards patients
Healthcare 2.7
Paediatricians 1.9
The results average of healthcare is 2.7/5.0 while the paediatricians result is 1.9. The service mission is to care the children and their parents and relatives and, in particular, to manage and to safeguard the health of the children. The health carers as well as the paediatricians are involved in the care process but they would like to “do all things”. The number of health carers and paediatrics is very low as a consequence of impact of economics crises in Italy: no new workers have been hired by management of ASLTo3 caused by “Piano di Rientro” of Health Minister.
3.5 TIME MANAGEMENT

Health carers

<table>
<thead>
<tr>
<th>Description</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waiting time in paediatrician office</td>
<td>3.3</td>
</tr>
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<td>3.8</td>
</tr>
<tr>
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<td>3.2</td>
</tr>
<tr>
<td>Doctors’ availability</td>
<td>3.0</td>
</tr>
<tr>
<td>Time with patient</td>
<td>3.0</td>
</tr>
<tr>
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<td>3.2</td>
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Paediatricians

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</tr>
<tr>
<td>Average</td>
<td>3.5</td>
</tr>
</tbody>
</table>

3.5.1 Time with patient
Health carers 3.3
Paediatricians 3.7

The results average of healthcare is 3.3/5.0 while the paediatricians result is 3.7. The time with patient is low for health carers and doctors in order to answer the question of relatives, parents and children comparing to the quality of care standards.

3.5.2 Doctors’ availability
Health carers 3.0
Paediatricians 3.0

The results average of healthcare and paediatricians is 3.0. Because of a low number of workers and of a kind of activities, health carers and paeditrians perceive not very good level of easiness to contact them. The main contact point is the emergency room for all needs.

3.5.3 Doctors’ waiting list
Health carers 3.2
Paediatricians 3.6

The results average of healthcare is 3.2/5.0 while the paediatricians result is 3.6.
the waiting list of doctors is monitored in two different way:

1. Director of Department – Healthcare level
2. Financial Manager – Management level

The monitoring processes include the analysis of procedures and operative mechanism in order to guarantee high level of performances.

3.5.4 Reaction to urgent calls

Health carers 3.8
Paediatricians 4.0

The results average of healthcare is 3.8/5.0 while the paediatricians result is 4.0.

In ASLTO3 there are two emergency services based in Pinerolo and in Rivoli. As standard of procedures, the reaction of healthcare team must be “very fast” with the collaboration and the cooperation of 112 Services.

3.2.5 Waiting time in paediatrician office

Health carers 3.0
Paediatricians 3.3

The results average of healthcare is 3.0/5.0 while the paediatricians result is 3.3.

The time with patient is low for health carers and doctors in order to answer the question of relatives, parents and children comparing to the quality of care standards. There is a Waiting list for each doctor and the perception of healthcare and paediatrics is low comparing to the time of reservation of medical examination.

4. CONCLUSION

In recent years the concern for the sustainability of health systems in Europe has grown. A new models of care and new knowledge have been recommended by scientific and management committees.

In this survey we have collected a lot of comments from health carers in order to identify the causes of professional distresses as the following:

- organisation
- knowledge management
- perspectives

“Practising nursing professionals assume responsibility for the planning and management of patient care, including the supervision of other healthcare workers, working autonomously or in teams with medical doctors and others in the application of preventive and curative care. Although nurses have traditionally provided care to patients under the guidance of a physician, they are increasingly permitted in many EU Member States to practise independently as professionals. This however depends to some degree on their qualifications and level of training, with an increasing proportion of nurses following university courses to degree level. The number of nurses may vary according to differences in healthcare systems. Equally, the number of nurses compared with other personnel (such as physicians) also varies between different providers of healthcare, for example between hospitals and long-term nursing care facilities (Eurostat, Healthcare personnel statistics – nursing and caring professionals, 18.01.2017).”

In Italy 374100 works in public and/or private health system with a ratio of 615 per 100.000 inhabitants (Eurostat, Healthcare personnel statistics – nursing and caring professionals, 18.01.2017).

In our organisation the average of years of healthcare professionals is 49 for woman and 51 for man. One of cause is related to the Italian Public Administration doesn’t provide an adequate turnover of workforce.

Healthcare is becoming increasingly complex across the globe; technology, delivery models, economic requirements, demographies and the epidemiology of disease are changing at a rapid pace. Despite the multiple efforts in defining common competencies and standards that all healthcare professionals should meet, it has become clear that educational and training programs have to adjust to the needs of societies.
they serve, and that the institutions that design and deliver those programs need to be accountable to society for the products they produce. Academic institutions that educate healthcare professionals will have to interact differently with the many stakeholders needed to create effective and efficient, and culturally appropriate healthcare systems. Present day medical education has its roots in the European university which traditionally valued academic freedom, autonomy and independent research over serving society and the job market; future efforts will require a fundamental shift in the outlook and measures of success for academic institutions. The recent outcomes and competency movement is a first step in that direction but more will need to be done. Rather than being one participant, possibly a reluctant one, academia should become the catalyst for change, the hub for stakeholder interactions, and the breeding ground for the new healthcare workforce (H. Thomas Aretz, Some thoughts about creating healthcare professionals that match what societies need, Journal Medical Teacher Volume 33, 2011 - Issue 8).

Emerging changes in health-care delivery are having a significant impact on the structure of health-care professionals’ education. Today it is recognized that medical knowledge doubles every 6–8 years, with new medical procedures emerging everyday. While the half-life of medical information is so short, the average physician practices 30 years and the average nurse 40 years. Continuing education thus represents an important challenge to face (Mantovani, Castelnuovo, Gaggioli, and Riva, Virtual Reality Training for Health-Care Professionals, CyberPsychology & Behavior. August 2003, Vol. 6, No. 4: 389-395). The Service of Workforce Development of ASLTO3 had promoted a survey in 2016 regaring to the “Professional 2.0” as a new profile of healthcare professional worker. The results underline the importance of devices in workplace in order to update the knowledge, to create the professional network, to know the last information on care (Presutti M., Professionista 2.0, ASLTO3: 2016).

A new organisation of work has been applied in ASLTO3: a lot of services have been unified by management in a different setting of care. One of most important goal of ASLTO3 is to guarantee the care continuity from hospital to territory services focusing the efforts on integration of workers and interoperability of ICT system.

In terms of needs analysis, the results underline two needs (before they are under 3): the hospital’s appearance (Health carers 2,4/5.0 and Paeditrians 2,7/5.0) and convenience (Health carers 3,1 and Paeditrians 2,9/5.0).

References:
(EUROPEAN COMMISSION DIRECTORATE-GENERAL FOR HEALTH AND FOOD SAFETY, Unit B1 - Performance of national health systems, Strategic investments for the future of healthcare, 27 February 2017)
European Summit on Digital Innovation for Active and Healthy Ageing, Blueprint Digital Transformation of Health and Care for the Ageing Society (6/12/2016)