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QUALITY & QUALITIES IN GENERAL PRACTICE

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The Quality between the case and the cases in general medicine

Dr Mario Baruchello

General practice is a professional area in which, more than any other clinical area, the doctor's behaviour tries to conciliate the best scientific evidence with the "human values" of the patient.
In fact, there are many situations in which the so-called "best evidence does not coincide with "best choice" of the sick patient : in these circumstances which decision should medical ethics recommend ?
Should we consider respect for the patient with a careful evaluation of health advocacy or should patient's requests be important as well ?
Will an ever so complicated scientific attitude win when for the same problem different guidelines exist?
How far are doctors aware that many decisions are influenced by economic evaluation ?
Isn't it important to always put our patient at the centre of the care process and to focus our attention to a rigorous methodology of management for single clinical cases ?
We cannot start clinical trials everywhere and in every situation!
Therefore, we often entrust ourselves to single observations, often a short number of cases. 30 years ago we weren't taught to report a clinical case correctly and even today it isn't taught at universities.
Paradoxically, even in the best reviews the aim of publishing case report seems to be to entertain colleagues with something witty or uncommon.
So we lose the intrinsic value of an observation that can have great value as scientific evidence.
The reflection on the constituent elements of the decisional process, the reconstruction of a relational climate, the description of a suffering person are connected to the conclusions of the physical examination.
There are organizations that have arranged these activities in a series of indicators that are the base of referrals between GPs and colleagues. www.agpal.com.au
Check up must be done meticulously in every phase of the disease: we could say that the semeiotic as an art and expression of an adapted professional competence, turns "high tech" science into "high touch" key !
The family doctor must be able to combine the attention to the measures in clinical activity with the qualitative aspects like soft data (the social atmosphere… the relationship with health disease… the ability to tolerate pain and suffering… the familiar inter relations).
There is therefore a thin red thread that connects the contents of this number.
The importance of knowing how to handle practical EBM instruments in the daily activity is shown here by Dr. Alessandro Battaggia who starts with a concrete clinical case having implications on hypertension therapy.
We can think critically about the prevalence of the symptoms and the pre-test probabilities of pathology in a diagnostic fields :it is essential to define for every patient the probability of having a pathology in relation to clinical, anamnestic and epidemiological data. For example, in an appendicitis case the probability of a pre-test in an emergency department is of 25% (< 60 years) and 4 % (> 65 years) while in a general practice for outpatients it is 0,7-1.6 % (Jama 196,276;1589).

Paolini's research proposes the involvement of patients in individual and community choices. Serious empowerment of our citizens is considered valuable. We are publishing this work so that these experiences can be further proposed for creative collaboration in many other settings.
Please do read the NETADO research on adolescence obesity that affects 30% of our population but only 40% of GPs mark or collect data in the records.
We invite you all to Florence to Wonca European Conference from the 27th to 30 th August: We already have 1500 registrations and 800 communications but it is an occasion you just can't miss out. They are our Olympic Games and we are preparing ourselves very carefully!
www.woncaeurope2006.org

ARR, NNT, NNH, LLH...

Maestro, il senso lor m'è duro!

(*Master, these words import hard meaning!*)

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The second part of the title is by Dante Alighieri (*The Divine Comedy, Hell, Canto III,12*) and it is very relevant since efficacy measures are very hard for most of the physicians. In this article we explain how to manage the difference between two frequencies of a phenomenon (Risk Difference). This item regards important evaluations about risks/benefits balance of medical interventions. In order to make the "pill more sweet" we will start from an operative example.

Scenario: patient with diabetic neuropathy

Z.A., woman, 75 years old, suffers from type 1 diabetes mellitus and needs insulin from many years. A severe sensitive neuropathy is worsening her quality of life because burning-pain is quite continuous to all four limbs. A neurologist, her friend, suggested to associate Tramadol to her chronic long-term therapy with Gabapentin. The patient was a pharmacist and she is used to scientific language so he gave her an article published in 1998 supporting this choice. ZA asks him to read and comment the article in order to decide together. She does not know this drug because when she was working the drug was not yet discovered and she heard from some friends that Tramadol takes some side effects very unpleasant and she is afraid that they could be dangerous. The article was by Haratu et al. and was published on Neurology (50:1842). Tramadol in this trial was compared with placebo in a RCT in which adults diabetic patients with a neuropathy like AZ's one were recruited. The trial considered 63 patients assigned to the drug and 64 patients assigned to the placebo. The primary outcome (lowering of pain) was monitored in a follow-up of 42 days using an appropriate scale. The treatment was considered dicotomically effective or ineffective if the patient on the 42nd day reported the pain with a score greater or smaller than 50% of baseline score. In 43 patients assigned to Tramadol and 23 patients assigned to placebo the drug was effective against neuropathic pain. The most common side effects were nausea (23.1%), constipation (21.5%), cephalea (16.9%) and sleepiness (12.3%). 9 patients of the group of Tramadol and 1 patient treated with placebo dropped out the trial because of side effects due to the treatment. 22 patients treated with placebo and 9 patients treated with Tramadol stopped the therapy because of lack of effectiveness. Authors concluded that Tramadol at the mean dosage of 210 mg/die is more effective than placebo in the treatment of diabetic neuropathy (p <0.01), giving a positive evaluation with regard to the safety of the drug. In the trial there was a box reporting the incidence of side effects potentially due to the treatment in the two groups: the analysis was about 66 patients treated with Tramadol and 66 patients treated with placebo. 15 patients in the treatment group and 2 in the control group suffered from nausea during the follow-up. 14 patients in the treatment group and 2 in the control group had constipation. 11 patients in the treatment group and 3 in the control group had cephalea. 8 patients in the treatment group and 4 in the control group had sleepiness. 9 patients in the treatment group and 1 in the control group halted the treatment because of side effects attributed to the treatment.

We will not consider internal and external validity of results. We will focus on efficacy results of the trial to give a rational evaluation of the risks/benefits balance of the treatment.

Key point: the Absolute Risk is a statistical and not clinical concept

The frequency of clinical improvement in the two arms during the follow-up is expressed by the following rate (patient with clinical improvement/patient of that group). This rate is the Absolute Risk. This concept is merely statistical and not clinic: in this case, for example, where Tramadol should give a clinical improvement, it is possible to calculate for every group the Absolute Risk of clinical improvement.

For patients treated with Tramadol: $AR_{Tramadol}$ = 43/63 = 0.683: that means 68.3 % of subjects treated with this drug improved.

For patients treated with placebo $AR_{placebo}$ = 23/64 = 0.359: that means 35.9% of subject treated with placebo improved.
It can surprise that 1 patient with neuropathy every 3 improved assuming placebo but this phenomenon is well known by researchers in antalgic therapy.

Our aim is to evaluate how we can compare relevant results in the two groups. Considering Tramadol 'effective', 'not effective' or 'harmful' as regard to effect on primary outcome (pain improvement) implies necessity to evaluate the net gain of intervention effectiveness, i.e. the added value in comparison with the condition of reference (= 'none drug assumption') represented by placebo assumption.
35% of patients improved just assuming placebo ($AR_{placebo}$ = 0.359).

Table 1	Improvement YES	Improvement NOT	Tot
TRAMADOL	43	20	63
PLACEBO	23	41	64

What is the added value in terms of efficacy for patients with Tramadol?
Instinctively we calculate the difference between percentage of patients treated with placebo ($AR_{placebo}$) and the percentage of patients improved with Tramadol ($AR_{Tramadol}$). This method is rational and give as a result the 'Risk Difference' or ARR (Absolute Risk Difference) that is the difference between two "risks to improve".

ARR = ($AR_{placebo}$ – $AR_{Tramadol}$) = 0.359 – 0.683 = - 0.323

What does mean a negative number? Let's reason about.
An intervention could be considered: a) neutral b) effective c) harmful depending on what happens in the treatment and control group.
If Tramadol would be harmful, the percentage of patients improved in the treatment group would be smaller of percentage of patients improved in the control group and the Risk Difference would be positive.
If the drug would not be effective or harmful but neutral the percentage of patients improved in the treatment group would be the same of that of control group and the Risk Difference would be zero.
If the percentage of subject improved in the treatment group the Risk Difference would be negative.

Key point: to compare the two groups we can evaluate the frequency of events recorded in the two groups (Risk Difference) or the rate between them (Risk Ratio or Relative Risk).

Warning: it often occurs that an intervention is studied using as outcome not increase of frequency of a desirable effect (like in Tramadol-trial) but reduction of frequency of an undesirable effect (like a drug that should reduce mortality).

What clinical meaning should we attribute to the gain (Risk Difference) of 32.3% in terms of Absolute Risk of effectiveness of Tramadol?

A good emotional impact could be provided by Relative Risk (RR), that is another way to compare two arms of a trial; this item will be treated in another future article.
If we compare the percentage of improvement in the patients treated with Tramadol ($AR_{Tramadol}$= 0.683) with patient receiving placebo ($AR_{placebo}$ = 0.359) we have 0.6863/0.359 = 1.899: the patients using the treatment had twice the effect (= 1.899 times bigger) than patients not assuming the treatment. This rate is Relative Risk (RR) and it is 'the residual part of baseline risk' recorded after the intervention. Let's repeat: the baseline risk of improving (the risk of control group) is 0.359. After the intervention 'the risk of improving' jumps to 0.683: using Tramadol 'the risk of improving' is 0.6863/0.359 = 1.899 times the baseline risk.

Key point: NNT is the number of patients needing to be treated to obtain the effect in at least 1 patient.

The ARR allows us to obtain another important measure: the Number Needed To Treat (NNT). NNT is easy to determine: it is necessary to consider only the absolute values of ARR (ignoring negative values); NNT is 1/ARR, in this case 1/0.323 = 3.09.
The number 3.09 is important because it is the number of patients that is necessary to treat with Tramadol to obtain the improvement in at least 1 of them.
What is the ideal value of NNT? One, of course. But the ideal value of NNT depends on the considered intervention. At Bandolier web site *http://www.jr2.ox.ac.uk/bandolier/booth/painpag/NNTstuff/numeric.htm* there is a useful database of NNTs allowing to evaluate the clinical significance of such measures when they are not intuitive.
For antalgic treatments (let's examine other NNT about other interventions) we can judge 3.09 like a satisfying value.
As much important as NNT is (NNT-1), that is the number of patients it is necessary to treat uselessly to have a effective result for at least 1 patient.

Key point: for every patient obtaining an improvement, the price to pay is to treat uselessly some other patients (NNT-1) and to expose some others to drug's side effects (z x NNT)

For antalgic drugs if NNT is 60, every 60 patients treated only one of them will have improvement, but 59 patients will not have any advantage from the treatment running the risk of side effect due to the drug.

Key point: NNH is NNT for an adverse event due to the treatment.

It is clear that Absolute Risk and NNT are obtainable in the same way for an adverse effect due to the drug.
Returning to our example, the table provided by authors is useful to consider the frequency of adverse events in the patients treated with the drug or with placebo (ARi = $AR_{Tramadol}$; Arc = $AR_{placebo}$) and their difference (ARR).
Warning: in these cases the negative value of ARR is not an advantages but a disadvantages because the Absolute Risk is not – like for a clinical improvement - a desirable effect.

Table 2 NNH	AR Treatment (ARi)	AR Control (ARc)	ARR = (ARc-ARi)	NNH = 1/ARR	
Nausea	15/65	2/66	-0.20	1/0,20	=4,98
Constipation	14/65	2/66	-0,185	1/0,185	=5,40
Cephalea	11/65	3/66	-0,123	1/0,123	=8,07
Sleepiness	8/65	4/66	-0,062	1/0,06 6	=16,00
Drop-Out	9/65	1/66	-0,123	1/0,123	=8,109

This NNT is called NNH (Number Needed To Harm).

The article shows correctly the adverse events probably due to the treatment in a table but even in absence of the table we would been able to estimate the clinic dimension of side effects considering only the prevalence of such effects in the patients assuming the treatment.

If we call "z" the prevalence of a side effect in the patients treated with Tramadol we will estimate the impact of this phenomenon multiplying such a prevalence by

NNT for outcome 'clinical improvement'.

z x NNT = number of patients undergoing a side effect per every patient obtaining advantages from the drug

Table 3- Percentage of patients undergoing an adverse event every patient obtaining a clinical improvement

Side effect	Prevalence (z)	NNT Improvement	Z X NNT
Nausea	0,231	3,09	0,714
Constipation	0,215	3,09	0,666
Cephalea	0,169	3,09	0,523
Sleepiness	0,123	3,09	0,380
Drop-Out	0,138	3,09	0,428

The number obtained from multiplication z x NNT identifies the clinic dimension of adverse events for every outcome obtained. For example, table 3 makes clear that for 1 patient improved - on the total of 3.09 treated subjects - 0.71 patients will suffer from nausea: to obtain 100 improvements we must treat 309 subjects, from whom 71 will suffer from nausea. Certainly, this method in somewhat imprecise because it does not consider (as the NNH) the net gain of side effects frequency between the two arms of the trial.

LLH = Likelihood of Being Helped or Harmed

A more precise way to evaluate the risks/benefits balance of a treatment is LLH.

Table 4- LLH (Likelihood of Being Helped or Harmed)

Side Effect	NNH single side effect	NNT of outcome 'pain improvment'	LLH = (1/NNT)/(1/NNH)
Nausea	4,98	3,09	1,612
Constipation	5,40	3,09	1,746
Cephalea	8,07	3,09	2,610
Sleepiness	16,00	3,09	5,173
Drop-Out	8,109	3,09	2,620

LLH = Likelihood of Being Helped or Harmed = (1/NNT)/(1/NNH). If the number obtained in this way is >1 the patient has more advantages as regards to the possible risks of the treatment. Otherwise (LLH <1) the risks/benefits balance is favourable to the risks. LLH of course has different values depending on NNT of efficacy measure chosen and on NNH of side effect considered. To evaluate LLH for the more clinically important side effect is very useful.

Conclusions

A pharmacological treatment (as any other intervention) should be given after a careful evaluation of risks-benefits balance. This evaluation is made usually by clinical judgement and the routine use of EBM techniques to formalize this analysis during every day practice is very improbable. However there are not rarely situations (for example administration of drug potentially dangerous) in which a formal evaluation of risk-benefits balance could be mandatory. Even more in cases, like that described, in witch the patient asks for it. It is remarkable that in this case we do not face the item of statistically significance. And this for two reasons: first, it is not the aim of this paper (too short); second, significance evaluation is a formal procedure certainly important in primary outcome analysis, because the statistical power of the trial is tailored on it. But in the evaluation of side effects of a treatment it should not be ethical to ignore some of them because of lack of statistical significance of differences recorded in the two groups: the trial is tailored on different outcome (the primary outcome) and in a controlled trial a side effect potentially important must be considered with care, apart from the significance of results.

A reasonable strategy in hypertension: Watchful Waiting?

Mario Baruchello - MMG – Tezze sul Brenta (VI)

A Case

Each time she walked into my office for her children's health problems, she described all symptoms very accurately, but the uneasy feeling in our relationship comes when she puts me in front of detailed diagnostic assumptions such as: "*Does Giuseppe have an acute suppurative streptococcus tonsillitis?...*" "*Does Agostino's hyperpyrexia and abdominalgy configure a syndrome due to viral gastroenteritis?...*"

Visiting patients on a daily basis is our main concern, but when this mother walks into my office it really makes me become nervous … Mrs. Michela is 40 years old, weighs 83 kg and is only 165 cm in height, she isn't capable of staying on a low-calorie diet and does not workout, she isn't able to reduce her salt intake and I can't forget the two episodes of pre-eclamptic toxaemia, which made her anticipate both deliveries. Mother, father and brothers are all affected by hypertension, but I have never been able to convince her that she had high blood pressure, since according to her I was guilty of a *White Coat Syndrome,* respect to her reassuring blood pressure measurements at home. I thought I had finally sidestepped all difficulties when, after coming back to the office with the pre-surgical examinations for an ordinary skin problem, the cardiologist confirmed the diagnosis of hypertension, finding a left ventricular hypertrophy after taking an ECG. For the pathology, the cardiologist gave her an exemption for prescription drug charges and prescribed (strange enough) a well-known diuretic with 25 mg Clortalidone.

After 7 days, the patient came in with a sheet of paper (see text in italics), and warned me **not to prescribe her medications anymore** since she had just passed

the most dramatic days in her young life because of doctors..

Difficulty in breathing…
Dry eyes
Stomachache
Pinching feeling in legs, arms and head…
Headache…
Leg and arm stiffness
Weakness and cold feeling
Weight in the chest
Feeling emotionally down
Blood loss
I'm very sensitive to medications
Last year I took Mag2 3 only for 3 days and had a haemorrhage... then I rested and everything went better…

I limited my comments to: "Did you really have all these side effects? And all of them at the same time? And all of this happened to you?", risking to be cancelled after many years of trust.

Conclusions

We usually say that spontaneous notifications of adverse reactions to prescription drugs, on behalf of GPs and patients, allows generating warning signs that may trigger subsequent surveys, even if they are not always confirmed by other sources (*A. Caputi - Dip . Pharmacology Univ. Messina 2004*). In Italy we lack a drug control culture (*R.Raschetti - Min. Salute – Tempo Medico, 2005*). Even though, perhaps, in uncommon cases such as this, "watchful waiting" is at times the only solution we have!

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Net-ADO: obesity in adolescence

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http://www.netaudit.org

Background

Obesity is one of the most widespread pathologies in the western world: the State of the World 2000 study, declared that the number of overweight people is almost equivalent to those who die of starvation. The Worldwatch Institute established that there are one billion two hundred million people with weight problems. In the United States 55% of the adult population is overweight, and 23% is frankly obese. Europe is getting nearer and nearer to these numbers: in Germany 17% males and 19% females are frankly obese. In Italy the prevalence of obesity seems inferior (7-8%) while that of people overweight reaches 40%. Italian studies, even if still partial, have included different socio-economical points of view, and have highlighted great differences between the Brianza area, the Friuli region and the province of Latina. In the province of Latina there were higher values (male: 18%, female: 30%) mainly in young men and women over 45 years of age. The association between body mass index and general death-rate is already well-known. Recently, a prospectic study that was undertaken on a million people (457.785 male and 588.369 female) confirmed that the death-rate for any known cause, such as cardiovascular disease, for cancer or other pathologies, increases throughout the entire interval that defines overweight, both in males and females, in all age groups. The risk associated to a high body mass index seems to be greater in white people respect to black. In the United States in 1990, more than 300.000 deaths were attributed directly to life styles and eating habits confirming that obesity is second, as cause of death, only to cigarette smoke (exceeding death due to drug abuse, fire arms and car accidents). Limiting the field to the adolescence period, the data are not more reassuring. From NEJM (n. 352 - 2005) the following points were extracted:

• Infantile Obesity (BMI greater than 95° percentile) averagely affected 15% children and adolescents in USA during the period 1999-2002; this data has doubled respect to the 1976-1999 period. [1]
• Obesity is found both in males and females, independently from race, ethnic group and socio-economical conditions. The risk of obesity increases among subjects that have a high birth weight (over 4 Kg) [2] and with obese parents. [3]
• Obesity is associated to significant negative consequences: in some states in the U.S. over 60% of the children that are overweight present at least one cardiovascular risk factor, and 25% presents at least two or more. [4]
• Type 2 diabetes today represents 45% of the new cases of diabetes found in the infantile age group, and prevails mainly among overweight or frankly obese kids. [5]
• The conditions associated to overweight (sleep-apnea and calculosis of the biliary tract) have triplicated among adolescents when comparing the 1979-1981 period to the 1997-1999 period.
• Infantile obesity that starts before 8 years of age and persists to adulthood is associated to an average BMI of 41 in adults, respect to the average BMI of 35 that represents the "standard" of those subjects that became obese as adults.
• The definition of obesity cannot be restricted only to the BMI extent, but must be also evaluated by means of percentile curves, which consider the BMI in relation to gender and age.
• In the 346th number of NEJM of 2002 there is an article that highlights the following aspects of the problem: Obesity has an important effect on cardiovascular risks, since it is directly connected to blood pressure, lipidic, lipoproteic and insulinic anomalies, without mentioning diabetes and coronary risks. It has been demonstrated that 80% of obese adolescents have a systolic and/or diastolic hypertension. Moreover, 97% of these subjects are affected by 4 or more cardiovascular risk factors: hypertryliceridemia, reduction of the HDL cholesterol levels, increase of the overall cholesterol. Increase of the systolic and/or diastolic blood pressure, reduction of maximal oxygen uptake, family anamnesis of coronaropathy, heart attack, angina or hypertension. Concerning the interventions that should be carried out to fight this high risk situation, we have talked a lot about increasing physical exercise, but we have not focused our attention on an equally important factor: the reduction of sedentary habits. In the Journal of American Medical Association (n 289 year 2003) the problem was examined, and the article stated that the T.V. is the major sedentary habit in the U.S., since an adult male,

according to the 1997 survey, passes an average of 29 hours per week in front of the television and a female approximately 34 hours. In the last decades, side-by-side to the increase of obesity, we have assisted to an increase in the number of televisions in homes, video-recorders and cable T.V., besides of the number of hours passed in front of the video. It has been proven that a long time spent in front of the television increases infantile obesity, even if in this view there have not been other comparative studies with other sedentary activities.

Aims of the descriptive research

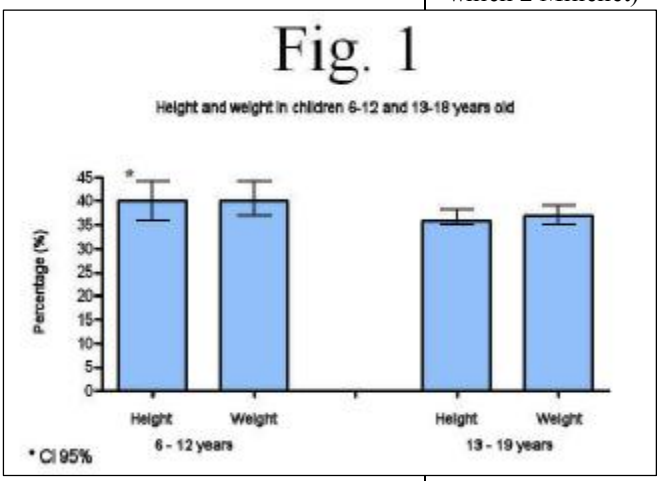
The scene of children and adolescent situations that we assist, concern the following:

a) frequency of weight recording in children and young kids between 6 to 18 years of age
b) the weight class, in particular the BMI percentile and the relative frequency of underweight, obesity and normal weight situations.

Data collection method

29 participating **GPs** adhered to **Phase I** in which overall data on children and young kids and the frequency of weight, height, and smoking inside the clinical records was collected.

Fig. 1



20 GPs, among the 29, participated during **Phase II**: measuring height without shoes and recording weight "without clothes" of children and adolescents (age included between 6 and 18), up to overall 15, which consecutively came into the office. The GPs also recorded the BMI percentile by age and gender, calculated by means of *Nutstat of Epiinfo* or web links where there were CDC Atlanta tables for example: http://www.blubberbuster.com/height_weight.html

Later every GP transferred the data on an EPIDATA file. The final data analysis was conducted using the EPI-INFO3-3 program.

I Phase

29 GPs participated during the 1st Phase. The GPs had overall 38676 patients and the average of assisted patients per each GP was 1333.6 patients. The overall number of patients between 6 and 18 was 3213 (740 between 6 and 12; 2473 from 13 to 18), which means 8.8% patients between 6 and18 on the entire patient population. The computer programs used were:

a) 25 Installations of Millewin (of which 2 Millenet)
b) 2 Phronesis
c) 1 FPF-Win
d) 1 Profim
e) 2 GPs used " other programs"

Large number of the installations (27) did not have an automatic calculation of the most important datum, the BMI PERCENTILE according to age and gender.

Children between 6 and 12, HEIGHT and WEIGHT in the clinical record in the previous 18 months (Fig 1).

The 29 GPs had 740 children in this age group. The height was measured in the previous 18 months in 296/740 children (40%; IC from 36% to 44%). The weight was measured in the previous 18 months in 299/740 children (40%; IC from 37% to 44%)

Kids from 13 to 18 years, HEIGHT and WEIGHT in the clinical record in the previous 18 months (Fig. 1)

The 29 GPs had 2473 children in this age group. The **height** was measured in the previous 18 months in 903/2473 children (36%; IC from 35% to 38%); the **weight** was measured in the previous 18 months in 912/2473 (37%; IC from 35% to 39%).

Percentile	Class	Num (Tot 280); %; IC 95%
< 5°	Underweight	10; **3.6%**; 2% - 6%
5° - 85°	Normal	185; **66%**; 60% - 71%
85° - 90°	Overweight	42; **15%**; 11% - 20%
> 95°	Obese	43; **15.4%**; 11% - 20%

II Phase

BMI percentile and class per age and gender.

The data regarding the BMI percentile per age and gender were collected prospectively by 20 GPs, with valid data for 280 children and young kids from 6 to 18.

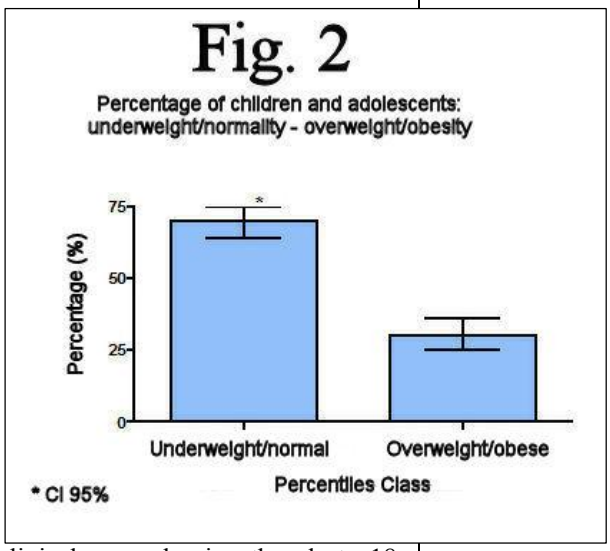
In **Table** you can evaluate all the proportions of the 4 percentile classes. In particular: while the percentage of underweight children and young kids is rather small (3.6%), the percentage of *overweight or obese* was about one third: **30.3%**, IC from 25% to 36% (**Fig. 2**).

The proportions of the 4 percentile classes are quite the same between male and female (**Fig. 3**).

Comments and conclusions

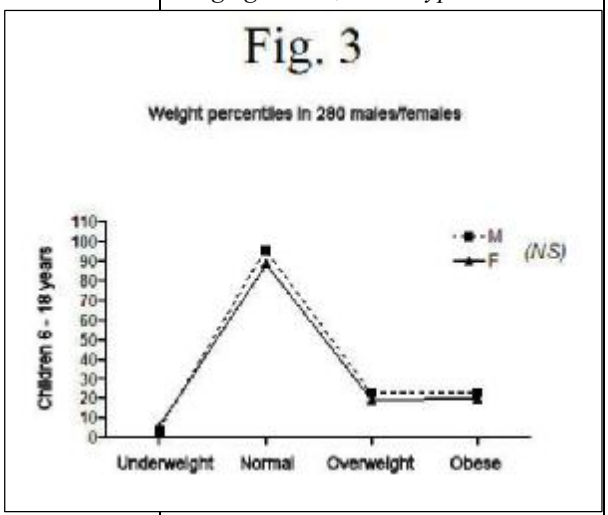
Our data proves that the Netaudit GPs must increase their sensibility towards height and weight measurements, as they result being

insufficient, since no more than 40% recorded the data in the patient



clinical records in the last 18 months. Regarding the recording of the internationally validated BMI percentile calculation per gender and age, we noticed that most of the software used by the GPs in the study (software that is among the most used and accredited at national level) do not allow BMI percentile calculation per gender and age. The GP's duty is to request that software-houses implement this important

parameter. In the end, the data regarding the BMI percentile according to gender and age makes us understand that the proportion of children and young kids that are overweight or frankly obese is rather high (30%) and can be overlapped between the two sex groups, which is in contrast with the well-known trend of parents to focalise their attention only on female overweight. The presence of a significant proportion of young patients with weight problems should push GPs in the future to evaluate how to introduce simple follow-up procedures, as informatics "reminders" in the clinical record and last but not least, introduce mini-counselling for young patients and their parents in the longitudinal context of GP.



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Formation of the diabetic patient: analysis of a pilot experiment in Ascoli Piceno

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INTRODUCTION

The chronic management of pathologies represents a wide part of the activity of the Doctor of General Medicine (general practitioner). It asks for specific cultural and organized approaches to optimize welfare levels. Between chronic pathologies, diabetes represents one of the conditions of greater professional engagement in the varied aspects of diagnosis, follow-up and therapeutic management.

In the Territorial Zone 13 of Ascoli Piceno (ASUR Marche), for many years, we made references to the documents of management that integrated some elaborate pathology from first SIMG and AMD (Italian diabetologist association) and then from SIMG-AMD and subsequently SID (Italian diabetologist society), in the formative experiences of the diabetic Patients. The correct interaction between leading cares and specialized level represents, in fact, a necessity for the Patient with diabetes, particularly of type 2, and for the accomplishment of an effective integrated management of the pathology. In order for the Italian general practitioner to proceed correctly, the actual tasks must be adapted from the organized formal procedure of the work and the interaction with the specialized level of care (diabetologist, cardiologist, neurologist, etc.) to result in effective and organized work. Despite this, there remains great variability and the potential to inappropriately enhance maladaptive Patient behaviors. The definition and reception of diagrams of follow-up, the co-occurrence of pathology and the frequent employment of more medicines gives a lot of responsibility on the part of the diabetic Patient and, a prerequisite knowledge base of the pathology and of its complications. From this introduction, a project was developed to organize formative experiences against groups of Patients and conducts by general practitioner with the specialized support of figures and of the representatives of the organizations of citizens (Citizenship-profit, diabetic association).

THE FORMATIVE PROJECT

There exists a permanent collaboration between doctors and citizen and voluntary associations, in the Territorial Zone 13, in the field of the project named "INTEGRA" INTEgrazione e Gestione della Rete Assistenziale (Integration and Management of the Charitable Net) represented the moment of planning and accomplishment of the formative route against the patients. In actuality, it is a search for the enhancement of the route for the citizen to evaluate the potential profitable role in the integrated management, between first and second level, of the chronic pathologies. Next to the analysis of behaviors and dysfunctions of the general medicine of this territory and of the specialized one is itself therefore the important moment of the formation. The experiences of training to the population already realized from the Health Business in the previous years represented a point of departure on some methodological innovations. Particularly:

- Selection and invitation of the patients carried out from the treating doctor;
- Number of total patients for not exceeding 80-100 with an involvement of groups of 4-5 doctors of general practitioner for meeting;
- Individual Compilation of a benefits-test aside of the participants
- Formative Illustration of cards connected to the arguments investigated in the test
- Illustration joined with some arguments, aside of general practitioner and Specialists participating, avoiding, as much as possible, technical approaches and connections closed with greatest interaction with the audience and spokespersons;
- Informative delivery of written personalized material for the group of general practitioner organizing the meeting;
- Distribution of the same material for the waiting room
- Explanation of the mechanisms of operation of the National Health System and of the contents of the formal procedure of interaction between GP-Patient and consulting specialist.

This last point is especially important for the development of an active role of the citizen to counteract incongruous behaviors and bad habits when the citizen in not in accordance with the conventional rules and deontological of the treating-consultant, but also and above all to avoid a conflictual relation between citizen and national health service.

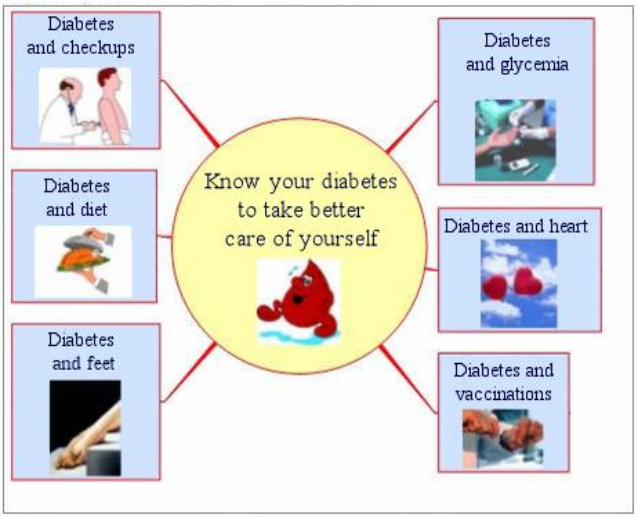
The first choice of the diabetes pathology to introduce in this formative program has been derived from the existence of an integrated business project of management. The operating route is begun with a first course "prototype" by a group of doctors from the territory with the purpose to experience "on the field" times, teaching material, reactions of the participants. Following this, for a short time, a "master" course in which a GP from every group introduced in the initiative will be involved, specialists cardiologists and adhering diabetologist, and deputy citizens part of the above-mentioned associations. The master course will serve to definitively elaborate and deliver the teaching material in a didactic form and to temporarily repeat the program like"cascading menu" for different territories.

THE CARRIED OUT EXPERIENCE

The course "prototype" has turned to Castel of Lama, in the group of four general practitioner (Cantalamessa, Re, Rossini, Travaglini). The teaching material was divided in your schedule (fig.1) checking the principle problems of diabetes:

- The role of glycemic index
- Relations between diabetes and cardiovascular equipment
- Advised vaccinations and their importance
- Care of feet and problematic joints
- Nutrition
- Advised follow-up and timing

Fig. 1: Topics of training course



To this schedule it has added the relevant part to the knowledge of the National Health System and of the relationship of the treating consultant.

Fig. 1: arguments of the course of formation

The pretest, composed of 13 questions timely distributed between the contents of six cards, has shown effective in pointing out the formative needs and in favoring the discussion and the interaction with the teachers. Particularly, the immediate evaluation of the replies of the Patients, agreed in the present discussion, and on the mistakes committed in the completion of the test.

Particularly, from a detailed analysis of the tests of the selected population, brings out important needs (% of responses around 30%) on frequency of the follow-up (ecg, bottom of the eye, glicate hemoglobin and correct care of the foot (request to indicate correct behaviors between various confusing items). In general the correct percentage of the compilation of the test really is for an "individual", how predictable it is, a natural spontaneous reply to the test. It's necessary to at least disagree with some of the tendency of the corrective mechanisms. This will be the object of analysis in the master course.

CONCLUSIONS

The analysis results of this first experiment was surely positive for the different aspects put under examination. The completion of the project emphasizes the necessity to appraise some objective guides to publicize the effectiveness of the intervention and particularly:

- To Examine and to introduce in a database the percentages of reply to the pretest for the varied arguments and for the different territory general practitioner to sharpen or to change their educational approach in the outpatient practice and to confront the degree of knowledge of the varied underpopulation on the varied arguments. The examination of the replies of the Patients in fact can represent a guide of the effectiveness of the educational message of the general practitioner in its daily practice.
- To Point out some guidelines of the trial (% of patient. with glicate hemoglobin, with bottom of the eye, with and./or. examen foot, with ECG, with evaluation of the CV risk……) preceding and following the formative experiment o appraise the impact on the welfare. An evolution and completion of the project can be represented from the training of the Patients for the effectiveness of process of individual audit (evaluation and recording weight, blood pressure, glicate hemoglobin, self monitoring on schedules of follow-up). The master course is programmed for the month of March 2006 and in the successive quarter every group of general practitioner should develop the suburban course according to the formal procedure outlined. It is expected the involvement of 50 MMG with a possible target of about one thousand patients and the successive teaching preparation relevant to other chronic pathologies of relief (heart failure, chronic obstructive pulmonary disease, hypertension). The champion of general practitioner and population involved will therefore be such as to agree to the detailed analysis of the possible impact of the formative trial and of audit regarding the welfare practice integrated for some diabetic Patient. A non secondary appearance that will go adequately analyzed with qualitative/quantitative methods pertains to the possible impact on the wrong behaviors, in the management of the actual illness, from the patient's view and enhancement of management and professional relation (less requests "incongruous" and "microunrest").

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