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EDITORIAL

Mario Baruchello

Motivational counseling in general practice and therapeutical relationship

The problem of observing prescriptions in general practice is a critical area of medical work and it is of relevant importance when reaching a positive and desired result is subject to a change in behaviour, be it linked to the lifestyle (habit of substance use, exercise, diet) or to medical practices (undergoing tests, taking medicines).
On one side the doctor wishes the patient to change, on the other the patient feels the difficulties and may feel guilty and under accusation and can therefore assume stalling position or even defensive ones.The few minutes of consultation with us are a challenge to this dynamics also because even the doctor may be caught by feelings of frustration and helplessness in face of a patient who does not follows his/her advices and may be pushed to cynical or even detached attitudes.
Steven Rollnich has developed a systemic approach that can be applied to our daily setting, known under the appellation of "short motivational counselling", whose communication styles are summarized schematically in: Instruct, Coach and Listen.
We all know that during an interview it is possible to jump from one style to another; in this context the flexibility of a G.P. allows to utilize completely the art of negotiation according to the circumstances, provided that he/she is aware of his/her predisposition to one of these communication styles and acts accordingly.
On the patient's side, predisposition to change must not be considered a personality trait but rather a subjective condition the person is in at any given time, which may last or change in a variable manner. The time factor, which is considered diachronic in the continuity of the relationship, in general practice is a strategic factor that allows us to modulate our approaches, suggesting diversified strategies. In this respect the doctors who participated in the work on Substitute Hormone Replacement Therapy (HRT) have expressed, for different reasons, concerns in the exchanges preparatory to the research protocol, concerns that, for the sake of brevity, were not reported in the work results. In face of so a delicate ground, where decisions affect a woman's quality of life, even intimately, the doctor is not always aware of the presence of deeply-set obstacles: the push for change arises only when the persons realize the existence of a problem and express the will of facing up to it and solving it, equipped with a sense of realistic optimism. It is for this reason that any mean that affects the non-medical determinants of the health is allowed if it is used by the G.P. also in the social life, both organizing a bike ride for the families and letting him/herself seen making his/her rounds on a bicycle.
This way might it be easier to convince the persons to adopt healthier lifestyles?
The colleagues of the Picenum Study have started a pilot experience in Italy of great value since they have succeeded in implicating also the hospital and the District doctors in a widened path toward suitability, a path that is been carried out with the cooperation of the top management of the Marche Regional Quality Agency. We shall probably hear about them at international level. It is exemplary that they acknowledge the following critical points in the study of GP:

1 Editorial
2 Anonymous questionnaire on the behaviour of GP's in connection with the means of transportation
3 Medicine and health? Any mean is valid!
4 The impact of a first encounter and counselling strategies on the interruption of HRT in GP
7 The PICENUM study

- the incorrect or incomplete filing of data,
- the lack of certainties on the suitability of the diagnoses the inability of many indicators to represent means suitable to give an accurate picture of complex situations in a GP setting.
- the risk that a "twisted" application of the initiative implies, on someone's part, an excess of attention to the required data, neglecting other activities which might be just as important.

In this respect Enzo Brizio wrote, during one of the lively discussions which were preliminary to choosing a research theme in the NET AUDIT: "Let's not forget that auditing cannot be only a computerized and automatic extrapolation, done through a query: auditing is, maybe most of all, a manual revision of the medical folders and the visual focusing on the patient, to relive, even for few minutes, a relationship that is more human and professional than data-processing".

(*) G.P.Guelfi, Ital Hearth J 2004; 5 (suppl. 8): 78S - 83S

Anonimous questionnaire on GP's behaviour in connection with the means of transportation

Introduction

Traffic accidents are a relevant growing cause of death, especially for the age groups under 50, with enormous consequences for family and society. On the other hand it is unquestionable by now - judging by the available data - that many accidents entailing wounded people could be prevented both by the use of safety belts, and by a more limited use of the car in some contexts, for instance using alternative means in towns on the plain or for extra-urban travel. General Practitioners (GP's) generally consider that their professional role has no responsibility in the topic of accidents. Sure enough the causes and the social responsibilities of the accidents are often extra-clinical, but you cannot deny that the GP is also a personal doctor as well as a clinician. In spite of the unquestionable role of the GP, in international literature there is no study that analyzes the GP's behaviour about mobility. By the following questionnaire, still in its pilot phase, we want to investigate better personal and professional habits and beliefs of Italian GP's in this sensitive sector.

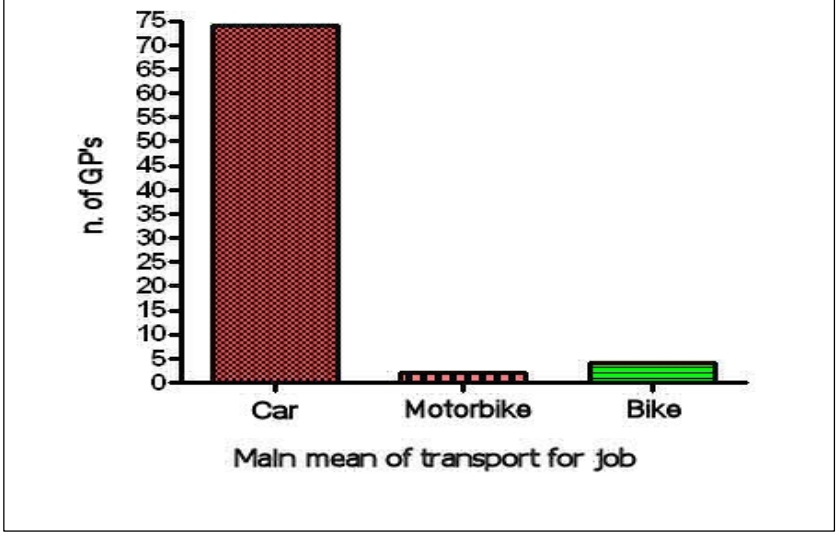
Methods

During training sessions paper questionnaires have been distributed to GP's in the province of Modena. We collected 84 questionnaires, of which 3 have not been analyzed due to mistakes and omissions in the compilation.

Results

GP's CHARACTERISTICS

1. Gender: 59 (73%) of the respondent GP's are male; 16 are female; 6 GP's have not declared their gender
2. Age groups: the declared age groups have been: 5 GP's under 40; 60 GP's between 41 and 55; 11 GP's over 55; 5 GP's have not declared their age
3. Town of residence and relevant orography: 40 (49.3%) GP's live in towns with less than 20 thousand inhabitants; 55 GP's (67.9%) live in towns with less than 100.000 inhabitants. 76 GP's (91%) live in towns on the plain



TRANSPORTATION MEANS OWNED BY GP's

1. Cars owned: 38 GP's (46.9%) declares to own only a car; 29 GP's (35.8%) 2 cars; 14 GP's (17.2%) more than 2 cars. The average size reported has been 1859 cc (DS=390)
2. Motorbikes owned: only 21% of GP's own a motorbike; the average size of the motorbikes is 310 cc.
3. Bicycles owned: 72 GP's (88.9%) own one or more bicycle. The female GP's own less bicycles than the male ones (on average 1.1 against 1.5% of the males: $p<0.05$; CI of the difference between -0.6 and -0.5)

USE OF THE DIFFERENT TRANSPORTATION MEANS

Main mean for the job: the main mean of transportation for the job is the car for 74 GP's (91%). In spite of the fact that 91% of the GP's live in a flat area only 4 GP's (4.9%) use the bicycle as their main means of transportation for their job. However, 31 GP's have declared that they sometimes use their bicycle for their job.

1. Bicycle and family life: 48 GP's have school age children, but only 7 (48%) take them "often"
2. or "very often" to school by bicycle and only 9 "often" or "very often" by foot.
3. Sporting use of the bicycle: 19 GP's make a sporting use of the bicycle during the week-end (a minimum of 30 Km at a sporting pace)

BY TRAIN TO THE CONGRESSES

53 GP's (65%) practically never use the train (never or practically never) when they go to congresses in towns farther away than 60 Km. The female GP's utilize the train more

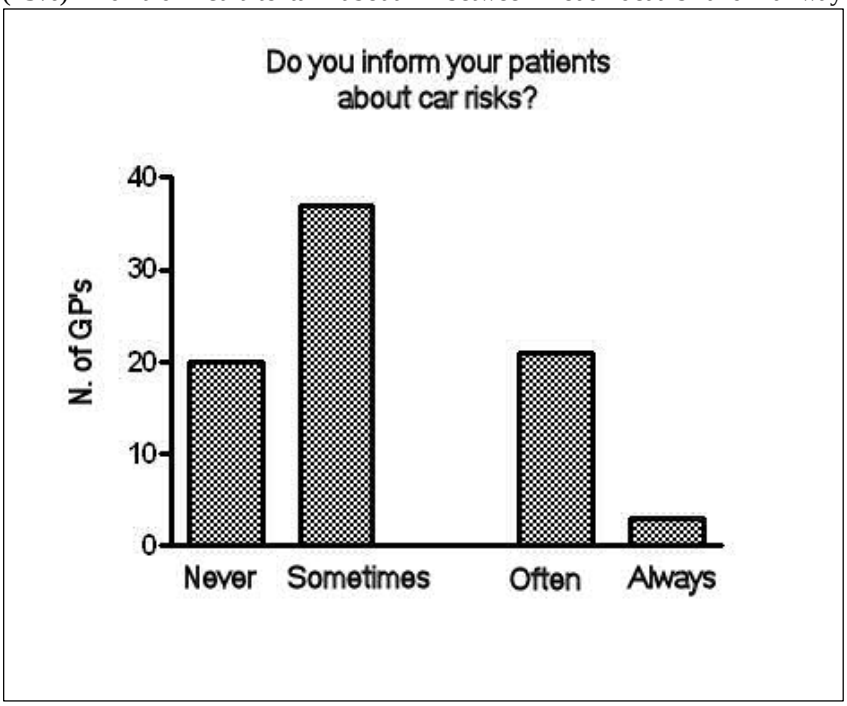
than their male counterparts (p = 0.007 at χ^2, with a positive test trend)

USE OF THE SAFETY BELTS

A premise: the questionnaire has been distributed BEFORE the deduction of points from the driving license went into effect. 15 GP's have declared they never, or practically never, use the belts when driving in town, while they have used them often or very often when driving out of town, in a very high percentage (72 GP's equal to 88.8%)

EDUCATION OF PATIENTS

Is it easy to talk about prevention of accidents with patients? 35 GP's (43%) find it difficult to talk about driving risks.



INFORMING PATIENTS REGARDING DRIVING RISKS

20 GP's never inform patients about driving risks; 37 some times; 21 often; 3 always

RECOMMENDING THE SPORTING USE OF BICYCLES

45 GP's (55.5%) recommend "often" or "very often" the use of bicycles. The data is clearly higher than for GP's professional use of bicycles (4 GP's use bicycles for their job; the difference between the two ratios is $p<0.001$).

THE MOST SUITABLE MOMENTS FOR TALKING ABOUT THE PREVENTION OF TRAFFIC ACCIDENTS

The answers that have been chosen the most:

1. "While discussing an accident underwent by the patient or by his/her relatives (36 GP's)
2. Upon issuing certificates for sports activity (35 GP's)

KNOWLEDGE OF THE RISKS ON THE PART OF GP's

We have tested this knowledge with a question where, in different options the GP had to state the ratio between road deaths and railway deaths. 63 GP's (77.8%) have identified the correct answers (road deaths between 15 and 40 times higher than rail deaths; see ISTAT bibliography)

INVOLVEMENT IN SEVERE ROAD ACCIDENTS

17 GP's (21%) have been involved in a severe road accident

Final comments

In our knowledge this pilot study is the first of this type in Italy. The results indicate that the GP, even if he/she is aware of the entity of traffic risks, he/she is inclined, just like the general population, to favour the use of the car. And in fact the use of the other means of transportation, and of the bicycle in particular, is rare even in the presence of a group of GP's who mostly live in a flat area and in villages or towns with a population inferior to 100 thousand inhabitants: The bicycle is utilized more for an intense sports activity during the week-end than for work or family use: few GP's take the children to school by bicycle or on foot. This can be important also a bad "model" for the other parents-patients.

The behaviours that protect one's own safety are not quantitatively correlated to our role: the use of safety belts (especially in town) is incomplete and most of the times the colleagues use the car instead of the train to attend congresses in distant localities. On the other side the GP's, in spite of some incorrect behaviour, seem to know well the road risks, as it can be inferred from the question on the road/rail death ratio.

Quite a few GP's find it difficult to talk about education against road accidents and in favour of a responsible transportation, even though a narrow majority says that it is easy to talk about means of transportation and health and also advise the patients to use the bicycle.

In short, as it can be expected, there are quite big contradictions between a fair knowledge and fair assumption of their role on the part of the GP's, and the inadequacy of our specific behaviours. Deeper research should help us in the future to understand if an improvement in our behaviours may translate in improvements in our capacity to talk to the top - to the persons who manage private and public transport - and, horizontally, towards behavioural changes in our patients, for a more conscious and less risky use of the private mechanical means of transportation.

Bibliography

ISTAT - Statistiche dei trasporti - Anno 2001

Medicine and health? Any means is valid!

Every year in September (we have reached our 8th edition), our editor Mario Baruchello organizes, with the cooperation of some volunteer associations, a bicycle trip for families, that winds for thirty Km along the Brenta river. The objective is to bring back together families, to exercise healthily in the open, to valorise a unique natural environment, to stimulate the coastal municipalities to alternative tourist

activities. The bicycle trip is awaited by children of 4 years of age up to elderly of 80's, all of them with absolutely non-pro bicycles! There never were any accidents, and the growing success is demonstrated by an attendance of over 1,000 bikers.

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The impact of a first encounter and counseling strategies regardig the interruption of HRT in GP

Angelo Augruso, Marina Balestrazzi, Mario Baruchello, Enzo Brizio, Luciano Caraceni, Antonio De Bari, Francesco Del Zotti, Alberto Dolci, Marco Grassi, Piero Quattrocchi, Maria Fiorenza Tota, Giovanni Vantaggi, Eugenio Visonà e lista Netaudit (www.netaudit.org)

Background

After the WHI study the role of HRT has been seriously questioned and already the GP's of Netaudit have demonstrated an initial reduction of HRT among their patients[1]. In this study about the HRT the participants GP's wanted to observe the behavior of women on HRT, after a meeting structured by the group around a series of educational and advisory speeches.

What are the aims of the study?

a) to evaluate some clinical characteristics of the women and of the HRT therapies at the time of the 1st card.
b) to evaluate in the same women on HRT enlisted with the perspective HRT card until November 30th, 2003 the number of women still on HRT at the end of January 2004.
c) to evaluate the ratio of women still in HRT at January 31st, 2004, compared to those at the date of the card compilation.
d) to analyze the type of approach of the GP (more oriented to orality; a greater user of written forms; he/she has/has not sent out postal invitations) and the relation with the decision taken.

Method

Inclusion and Exclusion Criteria

a) INCLUSION: Women who have been on HRT for at least 6 months or already oriented to use HRT in a continuative way.
b) EXCLUSION. We have excluded both HRT temporary patients, prescribed by the specialist expressly for a period not exceeding 3-6 months, maybe just after a hysterectomy; and women on HRT due to early menopause (under 45 years).

The study has been subdivided around the following points:

a) A short counselling in which the pros and cons of HRT are analyzed for the individual patient, also with the structured help of the data-collection card (see card at the end of the article).
b) Quick reading of an information form, in view of the WHI innovations. This form is handed over to the woman at the end of the visit.
c) Possible delivery during the 1st visit or in the following ones, of an "informed consent/dissent" form, in which the woman takes the responsibility to continue the HRT, in spite of the contrary advice of her GP.
d) For each woman arrived in a GP's office for a HRT prescription, in the period July 1st, 2003 up to November 30th, 2003, a card has been filled in, up to a maximum of 15 cards for each GP. The GP's had the possibility to fill in the cards in an opportunistic way, or by summoning the women by appointment, even after an active letter/phone call.

Results

We have analyzed the cards of 94 women between 49 and 74 years of age, with an average age of 55 (DS=4.3 years; minimum 47, maximum 67

1) Time between the beginning of

HRT: 12 women from less than 1 year; 60 from 1 to 5 years19 from 5-10 years; 3 for over 10 years

2) HRT formulation: in pills 39/94 women; in other formulations (plasters or gel) 51 women

3) Which doctor prescribed it? in most cases (77 cases) the gynaecologist

4) Main SUBJECTIVE reasons that have induced women to accept the HRT: the main causes are: a) fear of hot flushes (33); b) fear of ageing (29); c) fear of osteoporosis (20); other causes (6). The data are missing in 6 cases

5) OBJECTIVE reasons for the prosecution of the HRT: the colleagues have searched mainly in the folder the presence of objective data favourable to HRT: the hot flushes are present in 63 (94) patients; the dryness of the genital mucosae in 36 cases. Relatively not so frequent the early menopause (only 13 cases); the osteoporosis (only in 12 cases)

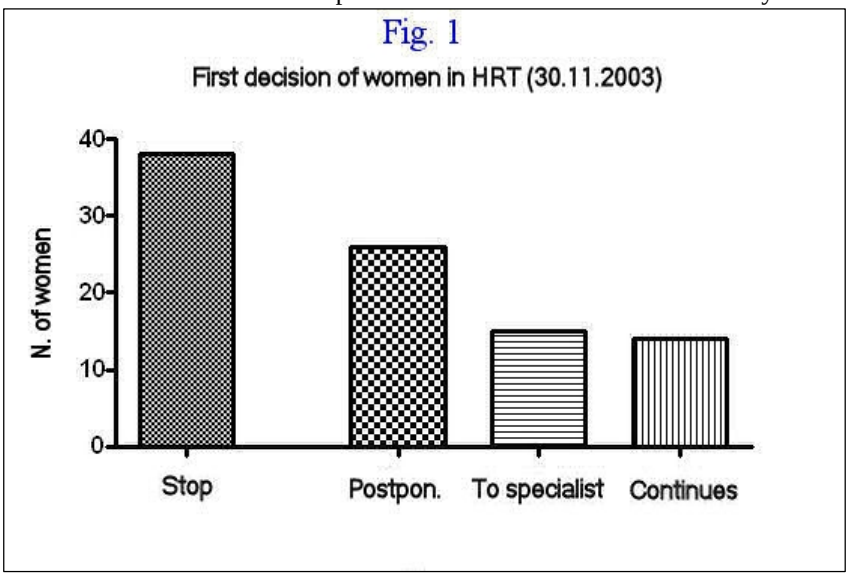
6) Information methods of GP towards the woman on HRT: in 46 cases GP's have used only oral ones; in 46 cases also written ones; in another 2 cases data were missing.

7) In the case in which the GP advised against continuation and the woman wanted to continue, the GP could invite the woman to sign a written "informed consent/dissent form". the form has been used by the GP's only in 9 cases.

8) First Decision after the first interview (picture 1): 38 women have decided to stop the HRT; 26 women have postponed the decision; 15 women have decided to consult the specialist; 14 women have decided to continue; in 1 case the information was missing

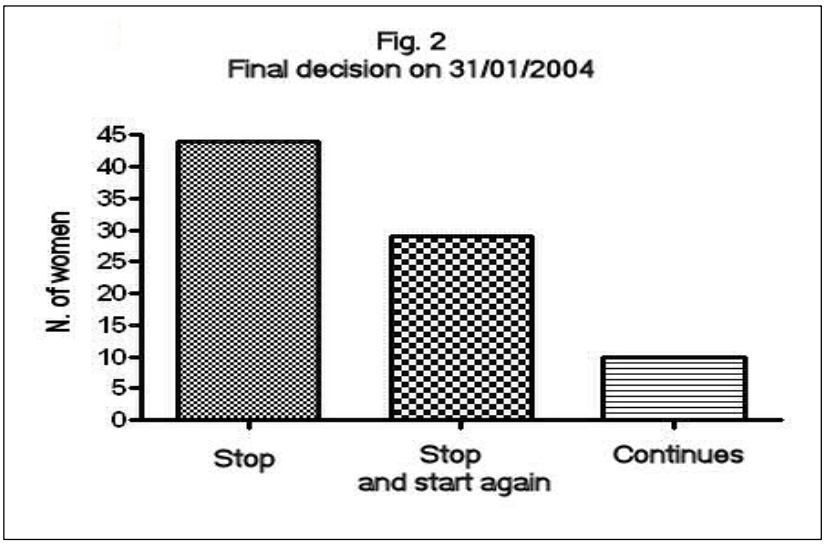
9) FINAL situation at January 31st, 2004 (picture 2): 44 women had stopped the HRT; 29 were continuing the HRT; 10 had interrupted and then started again; in 11 cases we could not collect clear data. At the end of the study of 81 cases we have ascertained that in 44 there had been an interruption of the therapy for at least two months: for the test of the 2 ratios this means a percentage reduction of 46%, with a confidence index in the reduction between 36% and 57% and p<0.0001

Fig. 1



Conclusions

Fig. 2



This pilot study highlights the importance of a first well structured interview on the decision of women interrupting the HRT. Already at the end of the interview 38 women out of 94 (40.4%) had decided to interrupt the HRT and at the end of the study, at a distance of 2 months, the number of women that were no longer on HRT (44/94) is slightly over the initial one. Because of the reduced sample it is not possible to give indications about the component more incisive of the medical intervention that convinced the woman to stop: maybe it was the use of written information during and after the first visit by the GP's in half of the interviews. On the other side, the GP's don't seem to have familiarity or trust in written forms that could "force" the decision (see the under-utilization of "informed dissent" forms) of the woman on HRT.

From the analysis of the data it seems that in this sample the decision of the Woman has been influenced first of all by the gynaecologist (82%) and secondly influenced by fears and subjective symptoms (hot flushes first of all), while the most pressing objective indications (presence of early menopause or osteoporosis) seem less frequent. It can therefore be inferred that the suspension of HRT in the 44 women, encouraged by the decisive scientific WHI study, does not involve relevant problems. By tradition and at times for "market" reasons, Italian GP's have suffered passively the decisions of the specialists, although HRT is a long term therapy and for many women it could very well be part of the

"primary care" This study demonstrates that, when new important data come up, the GP's, utilizing a structured approach, are mostly able, even on the first visit, to re-orient in a stable way the decisions of their patients.

Bibliography

Dolci A. et al: Diminuzione delle donne in Terapia Sostitutiva e Lista Netaudit - www.rivistaqq.it (Novembre 2003)

QUESTION CARD for WOMEN having the intention of carrying on continuative HRT
Netaudit Project July 2003 (for women 49-70 years old)

The questions in bold and preceded by a star (*) are direct questions to the woman

Date of the interview with the woman on HRT (dd/mm)
Name and Surname of the woman _____
Age ____ Sequence number of the patient _____

HRT started on:
□ 1st Prescription □ less than one year ago
□ 1 - 5 years □ 5 - 10 years
□ over 10 years

Type of HRT: □ pills □ plasters or gel

(*) What is the main reason for which you are carrying on/starting the HRT (1 answer only)?
□ fear of hot flushes □ fear of osteoporosis □ I feel better and/or it stops ageing □ painful intercourse (dyspareunia) □ habit and fear of abstinence from the drug
(*) Who/what has stimulated you mostly to starting/carrying on the HRT (1 answer only)?
□ my newspaper/magazine readings □ TV medical programs
□ my gynaecologist □ my friends/relatives

History of the most objective reasons
early menopause (under 45 years of age) □ YES □ NO
hot flushes □ YES □ NO
dryness of the vaginal mucosae □ YES □ NO
a history of osteoporosis □ YES □ NO

The following 2 questions have to be ansered only by women who have been on HRT for over one year:
Have you ever tried to suspend HRT? □ YES □ NO
Can you tell me if you are aware HRT may have some risks? □ YES □ NO
(Upon being asked she shows to be aware of at least one actual risk)

Does HRT carry any other risks (Mammary/uterine carcinoma in relatives; CVD) □ YES □ NO

TYPE OF INFORMATION supplied by the GP: □ oral only □ also by an information letter

WRITTEN FORM OF INFORMED DISSENT: handed over □ YES □ NO
Only for the GP who has handed over the Form: has it been signed and collected □ YES □ NO

FIRST DECISION OF THE WOMAN
□ carries on □ is undecided □ consults a specialist □ stops HRT

FINAL SITUATION as of January 31st, 2004
□ carries on □ has interrupted and then started again □ has stopped for at least 2 months

THE PICENUM STUDY: A PROJECT FOR THE CONTINUOUS IMPROVEMENT OF QUALITY

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** Division of Internal Medicine-ASUR Marche-Territorial Zone 11 - Fermo

Partecipating GPs

(S. Appoggetti, F. Ciribe, D. Cognigni, V. Landro, P. Misericordia, M. Mozzorecchia, G. Napolitano, G. Olimpi, P. Signore, L. Sistilli)

Abstract

The study group, after characterizing the chronic diseases with high prevalence common to general practice (on a sample of 10 General Practitioners (GPs) of ASUR Marche- Territorial Zone 11 - Fermo) and to the Internal Medicine Divisions of the Regione Marche, selected a set of 52 performance indicators (PI) of process and of outcome, regarding the specified diseases, accredited by international societies specialized in evaluating the quality of health care.

The selected indicators were then applied, before and after six months, to the database (software Millewin) of 10 GPs and to the Hospital Discharge Forms (HDF) (analysis system Epi-Info) of 23 Internal Medicine Divisions of the Regione Marche chosen according to the criterion of the higher frequency of the prevalent chronic diseases.

The analysis of the Performance Measures (PMs) showed a 10% increase of diagnosis recording and a 26.7% increase of the overall adhesion to the selected PI in the 10 GP group; the PMs of the Internal Medicine Divisions taken in consideration were also characterized, setting up a "time 0" for the start off of quality improvement.

Introduction

The possibility of evaluating the final or the intermediate products of the various processes is an unreplaceable tool used to plan and to guarantee their improvement, even for health care.

Therefore both the clinical practice of the territorial primary care and the clinical practice of the hospitals' secondary care must inevitably be provided with means to examine their work.

While for hospital activities the data "institutionally" gathered should provide elements of study and of examination, on the other hand, as far as the territorial medicine and particularly the general practice are concerned, there are no systematic methodologies of observation and of analysis.

In order to point out the "real" activity of general practice and also to plan, to enable and to value the improvements of the quality of its performances, along a course of close integration with hospital practice on how to read the respective indicators of process and of outcome, it was given birth to the PICENUM study whose name besides pointing out the territorial zone where the initiative took place, it is also the acronym of *Performance Indicators Continuous Evaluation as Necessity for Upgrade in Medicine*, an expression that, we believe, effectually reproduces the spirit that the study represents.

Goals

- § to utilize PI in a system that looks at the continuous improvement of quality
- § to trace a course of high grade integration and sharing between general practice and hospital practice, both in prevention-diagnosis-therapy processes and in the method of interpretation of their indicators of process and of outcome
- § to prove that the activity of general practice must not be valued only by the means of "expenses indicators"
- § to specify a tool "of quality" that the physician can employ for the audit of his own activity
- § to operate appropriately(proofs of efficacy) in patients affected by a chronic disease.

Method

Identification of the prevalent diseases

The prevalent chronic diseases in territorial primary care were identified by the 10 GPs group according to data gathered by the common program of registration (Millewin) and also on the basis of the requested effort and resources; such diseases resulted to be: Asthma, Chronic Obstructive Pulmonary Disease (COPD), Heart Failure, Coronary Heart Disease (CHD), Type 2 Diabetes, Primary Blood Hypertension, Hypercholesterolemia (the last three of these and sigarette smoking configure the "overall cardiovascular risk").

The prevalent diseases in hospital secondary care were identified by the analysis of the HDF of the 45 Divisions of Internal Medicine in the Regione Marche; the statistical analysis was carried out with the Epi-Info software, version 6.0; the diseases most frequently diagnosed on discharge of the 374332 admissions examined from 1997 till 2002 resulted to be: Cerebrovascular Diseases, Heart Failure, Pneumonia, COPD, CHD.

General practice and Hospital practice shared therefore the following prevalent diseases: Asthma, COPD, Heart Failure, CHD; due to their high prevalence, the study included the cerebrovascular diseases (high prevalence in hospital practice) and the diseases that form the overall cardiovascular risk (high prevalence in general practice).

Choice of the Performance Indicators

After a wide research among issues on PI topics, a few sets of indicators, employed by institutions and societies dedicated to the evaluation and to the investigation of quality in health care, particularly in countries certainly leading in experience on

this subject such as UK and USA, were examined.

The institutions mainly taken as references were:

Agency for Healthcare Research and Quality, *AHRQ*; National Quality Measures Clearinghouse, *NQMC*; Royal College of General Practitioners, *RCGP*; American Health Quality Association, *AHQA*; National Health Service, *NHS;* American Academy of Family Physicians, *AAFP*.

PI were identified for each of the selected prevalent diseases, reaching a total of 52 indicators that were classified in four groups:

Two groups (process and outcome PI: n° 36; PI for hospital admissions of outpatient diseases: n° 5) concerning the activity of General Practice and two groups (Hospital mortality PI: n° 4; "routine volume": n° 7) concerning hospital medical practice.

Partecipating General Practitioners

According to the interest taken in the initiative, 10 GPs of the Azienda Sanitaria - Zone 11 of Regione Marche who used the Millewin software for their professional activity, were recruited.

The application and the construction of the indicators

The selected indicators were applied to the database (Millewin software) of the 10 GPs on two subsequent examinations (1.9.2003 and 1.3.2004); *electronic queries of research* able to draw out data from Millewin were prepared for the construction of the 36 indicators (numerator and denominator):

- § n° 53 *electronic queries of research* able to draw out data required for the indicators' construction
- § n° 13 *electronic queries of research* which constitute elements of support for the right recording of required data (*electronic queries of research* of facilitation).

Each GP carried out the examination of data on his database using the *electronic queries of research* and recording the results on report sheets which were subsequently sent (e-mail) to the authors of the study.

In order to make the collected data the more homogeneous as possible, the application of the indicators was extended to the 23 divisions of Internal Medicine of the Regione Marche which presented at least 4 of the 5 prevalent diseases in their discharge diagnosis. The software used to obtain data from the DBF files, containing the HDFs of the regional divisions of Internal Medicine, supplied by The Epidemiological Net of the Health Agency of Regione Marche, was Epi-Info version 6.0. For these hospital divisions data referred to the period 1997 - 2002.

The utilized data were identified by the ratio between numerator (for example: number of patients affected by heart failure who underwent echocardiography) and denominator (number of patients affected by heart failure) on a total number of reference (generally 100 or 1000).

Results

Tab. 1 reports the results concerning the drawing out of data at the time of 01.03.2004 for GPs and of the period 1997-2002 for the divisions of Internal Medicine.

The number of diagnosis recorded in the database of the GPs, concerning the chronic diseases subject of the study, showed a 10% increase between the first (01.09.2003) and the second examination (01.03.2004): 4853 vs 5345; particularly, during the same period, the adhesion to the selected indicators of performance had a 26.7% increase (10809 vs 13693) (Fig 1).

Discussion

The elements that characterize this initiative, that would like to be included among those tending towards the monitoring and the improvement of quality in health context, are:

- § the use of PI strongly accredited by the most qualified international institutions and societies specialized in the evaluation of quality for health services
- § integration between territorial medical practice and hospital practice both in the processes of prevention-diagnosis-therapy and in the methods for the interpretation of their respective indicators of process and outcome
- § the evaluation of performance on a course that expects to carry out educational and formative events involving at the same time (hospital and territory) on evidence based medicine
- § the partecipation of GPs belonging to a sole territorial reality, representatives of a large band of their class in order to gather data in a shared way, following "realistic" and not "of execellence" working conditions,; a factor which garantees the initiative to be highly reproduceable
- § the identification of clinical ambits of major involvement, both for general practice and for hospital practice
- § the specification of a tool to provide the physician with for the activity *self-audit*, with the possibility to compare with data that represent medium levels of behaviour.

The increase of 10% in the recording of diagnosis (4853 vs 5345) and the more significant increase in the "overall" adhesion to PI (26.7%; 15275 vs 19353) (Fig.1) were reached in only six months, which proves the effectiveness in improving the quality of activities, promoted solely by the awareness to submit ones behaviour to a process of *audit*; it can be supposed that, besides paying more attention to a few aspects of clinical-management, the formalities of recording and of filing of data itself are improved.

In the future examinations, the ambits where it is expected a higher and faster level of improvement are those relative to the process indicators. Further data, particularly referred to outcome indicators (for example: rates of mortality and of hospitalization), on the other hand already numerically "low" in absolute terms in the starting observations, might exhibit significant changes only on a long distance of time and only in case of a large adhesion to clinical behaviours of the physicians belonging to all the ambits of reference.

The further stages of the PICENUM study

The number of GP is expected to increase (25 GPs of the province of Ascoli Piceno have been recruited).

Six-monthly observations of data in the database of the GP are carried out (data of 1.9.2004 are already available).

Annual observations of data relative to the activity of the selected Divisions of Internal Medicine are expected to be carried out (data of 2003 are available).

The end date of the study was actually not established, which means that the distinguishing feature of the course of improvement of quality is *continuity;* it is quite acceptable that *in itinere*, depending on the arising of new requirements, it might be necessary to bring changes and arrangements to methods and formalities of data examination.

Table 1: Performance Indicators and Performance Measures (PMs) at the time of 01.03.2004

General Practice Process and Outcome Performance Indicators	15453 patients	
HEART FAILURE	*PMs (%)*	350 cases (1.0 %)
Percent of heart failure patients prescribed ACE inhibitor *(2)*	51.9	
Percent of heart failure patients having evaluation of left ventricular ejection fraction *(1,2)*	46.7	
Percent of patients with heart failure who have been advised to restrict dietary sodium *(9)*	3.9	
CORONARY HEART DISEASE	*PMs (%)*	228 cases (1.5 %)
Percent of patients with CHD who have had their blood pressure measured *(9)*	60.6	
Percent of patients with CHD who have had their serum lipids measured *(6,9)*	48.6	
Percent of patients post-MI that present total cholesterol □5mmol/l and /or LDL-cholesterol □3mmol/l on treatment with a statin *(9)*	30.7	
Percent of patients with CHD who have been treated with aspirin *(9)*	76.2	
Percent of patients with CHD who have been treated with ß-blocker *(9)*	28.7	
Percent of patients with CHD who smoke and have been advised to stop *(6,9)*	0.96	
ASTHMA	PMs (%)	220 cases (1.4 %)
Percent of people with asthma who are prescribed medications acceptable as primary therapy for long-term control of asthma (inhaled corticosteroids) *(2,8)*	22.7	
Percent of people with asthma who receive influenza vaccination *(11)*	30.9	
COPD	PMs (%)	404 cases (2.6 %)
Percent of patients with COPD who have one or more spirometrytests per year *(7)*	22.0	
Percent of patients with COPD who have a blood gases test per year *(7)*	2.9	
Percent of patients with COPD who ever received an pneumococcol vaccination *(2)*	96.7	
Percent of patients with COPD who received an influenza vaccination in the past 12 months *(2)*	56.4	
TYPE 2 DIABETES	PMs (%)	827 cases (5.4 %)
Percent of adults with diabetes who had a hemoglobin A1c measurement at least once in past year *(2)*	40.0	
Percent of patients with diabetes who had a lipid profile in past two years *(2)*	70.0	
Percent of adults with diabetes who had a retinal eye examination in past year *(2)*	24.1	
Percent of adults with diabetes who had a foot examination in past year *(2,10)*	2.4	
Percent of adults with diabetes who had an influenza immunization in past year *(2)*	45.9	
Percent of adults with diabetes with HbA1c level under control *(2)*	20.3	
Percent adults with diabetes with blood pressure under control *(2)*	38.4	
PRIMARY BLOOD HYPERTENSION	PMs (%)	3178 cases (20.6 %)
Percent of people age 21 and over having blood pressure checked within past 2 years *(2)*	26.5	
Percent of patients with hypertension who have blood pressure measured and recorded in past six months *(7)*	39.8	
Percent of patients with hypertension who have serum creatinine test in past year *(7)*	50.7	
Percent of patients with hypertension who had a lipid profile in past year *(7)*	53.6	
Percent of patients with hypertension with blood pressure under control *(2)*	52.5	
Percent of patients with hypertension whose most recent blood pressure reading was greater than or equal to 160/100 or no blood pressure recorded in past year *(3)*	50.4	
HYPERCHOLESTEROLEMIA	PMs (%)	
Percent of men (age 35-65) and women (age 45-65) receiving cholesterol measurement within past 5 years *(2)*	62.6	

Percent of men (age >45) and women (age > 55) with multiple (2+) risk factors for CHD receiving LDL-cholesterol measurement *(14)*	33.5	
Percent of patients with CHD on drug therapy to achieve LDL-cholesterol goals *(14)*	27.9	
Percent of patients with CHD who present LDL-cholesterol <100 mg/dl *(14)*	4.4	
Percent of patients with multiple (2+) risk factors for CHD who present LDL-cholesterol <130 mg/dl *(14)*	8.1	
Percent of patients with 0-1 risk factors for CHD who present LDL-cholesterol <160 mg/dl *(14)*	4.2	

CIGARETTE SMOKING	PMs (%)	
Percent of smokers receiving advice to quit smoking *(2)*	2.5	
Percent of people currently not using tobacco *(3)*	8.0	

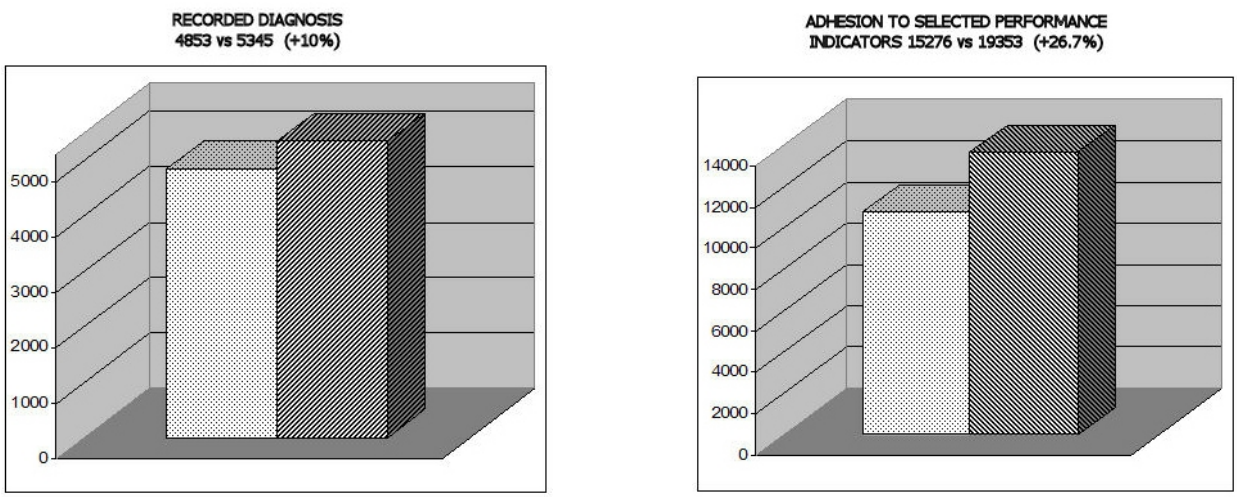
Data referred to the period 1997-2002

General Practice Performance Indicators: **PI for hospital admissions of outpatient diseases**	*PMs (/1000)*
Hospital admission rate for diabetes mellitus (first diagnosis on the HDF) *(5)*	0.8
Hospital admission rate for COPD (first diagnosis on the HDF) *(5)*	1.7
Hospital admission rate for pneumonia (first diagnosis on the HDF) *(5)*	1.4
Hospital admission rate for hypertension (first diagnosis on the HDF) *(5)*	1.7
Hospital admission rate for asthma (first diagnosis on the HDF) *(5)*	0.7

Hospital Medical Practice Performance Indicators: **Hospital mortality PI**	*PMs (/1000)*
Mortality Rate for Heart Failure (first diagnosis on the HDF) *(4)*	11
Mortality Rate for COPD (first diagnosis on the HDF) *(4)*	1.6
Mortality Rate for Coronary Heart Disease (first diagnosis on the HDF) *(4)*	4.6
Mortality Rate for Stroke (first diagnosis on the HDF) *(4)*	8.3

Hospital Medical Practice Performance Indicators: **Volume of procedures PI**	PMs (%)
Percent of inpatients with heart failure having evaluation of left ventricular ejection fraction *(2)*	7,9
Percent of inpatients with COPD having a spirometrytest *(7)*	1,8
Percent of inpatients with COPD who have a blood gases test *(7)*	34,1
Percent of inpatients with coronary heart disease who have an echocardiografy *(7)*	10,4
Percent of inpatients with coronary heart disease who have an electrocardiogram *(7)*	15,7
Percent of inpatients with cerebrovascular diseases having cerebral CT	25,1
Percent of inpatients with cerebrovascular diseases having Epiaortic Ultrasound Scanner	4,8

Pict. 1: Data from database of GP's (n°10)



References

1. A Measure of Quality. Improving Performance in American Health Care. The American Health Quality Association. 2000.

2. Agency for Healthcare Research and Quality (AHRQ). National Healthcare Quality Report: Preliminary Measure Set. Rockville, June 2002.
3. Agency for Healthcare Research and Quality (AHRQ). Quality Assessment. National Quality Measures Clearinghouse (NQMC). In the Website of AHRQ, 2003.
4. Agency for Healthcare Research and Quality (AHRQ): Inpatient Quality Indicators, Version 2.1, Revision 2. Rockville, September 2003.
5. Agency for Healthcare Research and Quality (AHRQ): Prevention Quality Indicators, Version 2.1, Revision 2. Rockville, January 2003.
6. Chronic Stable Coronary Artery Disease. Core Physician Performance Measurement Set. Physician Consortium for Performance Improvement. American Medical Association, 2002.
7. CONQUEST 2.0 - COmputerized Needs-oriented QUality measurement Evaluation SysTem. In the Website of Agency for Health Care Policy and Research (AHCPR).
8. Clinical Practice Evaluation Program (CPEP). Evidence Based Review Criteria for the Primary Care Management for the Adults with Asthma. Royal College of General Practitioners, 2000 (criteria current until December 2002).
9. Clinical Practice Evaluation Program (CPEP). Evidence Based Review Criteria for the Primary Care Management for the Coronary Heart Disease. Royal College of General Practitioners, 2000 (criteria current until December 2001).
10. Clinical Practice Evaluation Program (CPEP). Evidence Based Review Criteria for the Primary Care Management for the Type 2 Diabetes: Foot Care. Royal College of General Practitioners, 2000 (criteria current until December 2003).
11. Effects of Flow Sheet Implementation on Physician Performance in the Management of Asthmatic Patients. Family Medicine. G. Ruoff; 34(7):514-7; 2002.
12. Forum: Obiettivo Qualità ! Società Italiana di Medicina Generale; Aprile 2003.
13. Healthy People 2010. In Website: Centers for Disease Control and Prevention National Institutes of Health, 2003.
14. National Cholesterol Education Program (NCEP). Third Report. Detection, Evaluation, and Treatment of High Blood Cholesterol in Adults (Adult Treatment Panel III). National Heart, Lung, and Blood Institute. National Institutes of Health. NIH Publication No. 01-3670, 2001
15. Diabete: indicatori di qualità e qualità dell'assistenza in medicina generale. Il diabete mellito come modello di riferimento per tutte le patologie croniche. G. Medea, F. Samani. Rivista SIMG, 4-5, Luglio-Ottobre 2003.
16. Measuring General Practice. A demonstration project to develop and test a set of primary care clinical quality indicators. National Primary Care Research and Development Centre, University of Manchester. RAND, Santa Monica, CA, USA. 2003.
17. New contract for general practitioners. P. Shekelle, British Medical Journal, 326:457-458; 2003.
18. Policy Statement. Quality Indicators in General Practice. The Royal College of General Practitioners. 2002.
19. The New General Medical Services Contract. 2003.