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Practice report of a family doctor in vocational training in a Brazilian Alagoas semi-arid area.

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Where, who,what

A team ; one GP in first year vocational training, one nurse, two nursing assistants, three community health agents and one administrative assistant

Primary Care Unit n°8, which covers 10 small villages. Villages are 25 to 30 km long. 10 patients a day (20 in periods of drought)

Lack of basic material such as pediatric scale, lack of infrastructure, illiteracy and poverty of the population.

Teotônio Vilela, a municipality of the state of Alagoas, in northeast Brazil, in a zone of extreme poverty (level 7, WHO)

The team organizes sessions of health education following Paulo Freire principles [2]

The vocational training activities of a GP in the Mais Médicos (More Doctors) Program

In 1994 the Family Health Strategy was implanted by the Brazilian Unified Health System (SUS) as the basis of its Primary Care public service. The lack of interest of the medical professionals in working in remote areas practically drove the program to bankruptcy. Shortage of manpower led to the launch of the Mais Médicos (More Doctors Program) in 2013 based on three strategic fronts: i) new medical schools; ii) investments in the infrastructure of Primary Healthcare Units; iii) allocation of Brazilian and foreign doctors [1]. The first author, trained in Universidad Franz Tamayo, Cochabamba, Bolivia, after working for several years as a dentist in Brazil, is in first year vocational training in rural medicine in Teotônio Vilela, a municipality of the state of Alagoas. This work began with the desire to portray the daily life, difficulties and needs observed during medical care in a rural area.

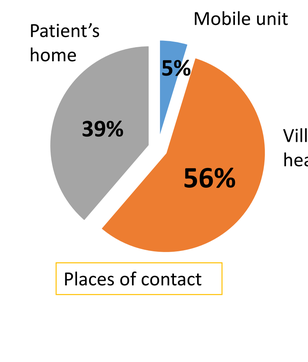
The first author acts strongly in health education and promotion, using the possible resources to work with the issues related to predominant illiteracy, seeking to educate the community on overmedicalization, self-medication, environmental and body hygiene, abandonment or irregularity of treatment, inadequate nutrient intake etc. The total rural population under our care is around 560 people who live either in the villages or in smaller and more isolated groups of families. Some of them are in rural properties of landowners' farms. Services to these communities are scheduled so that we can visit each family every two weeks.

Methods: Factual observation of the contacts with the population using CIAP-2 [3] to describe the clinical activities and Q-Codes [4], a new tool to describe the non-clinical situations at stake during the patient doctor encounters and activities

Data on 403 patients on 675 seen in two months (aug. Sept 2019)

Period: Aug-Sept 2019
- # contacts in 2 months: 675
- # patients in 2 months : 406
- # new patients in 2 months: 2%
- # mean contacts: 20 /day
- # places of the settings of encounter: 9
- # home visit : 134/months
- # km to reach the patients: 960 km/months
- # health education groups : 4

Doctor life
- # of sleep hours; 6h/night
- # km from home to the working place: 3.136 km/months



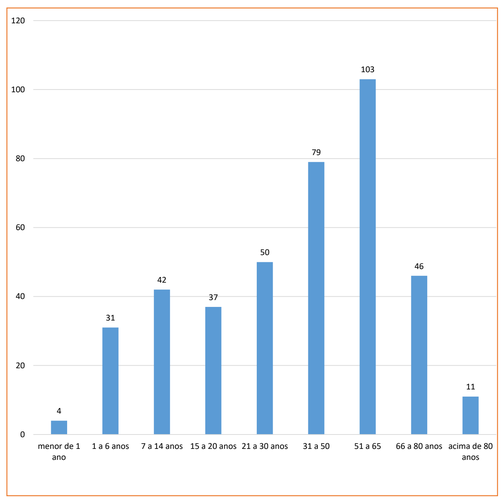
Places of contact

59%

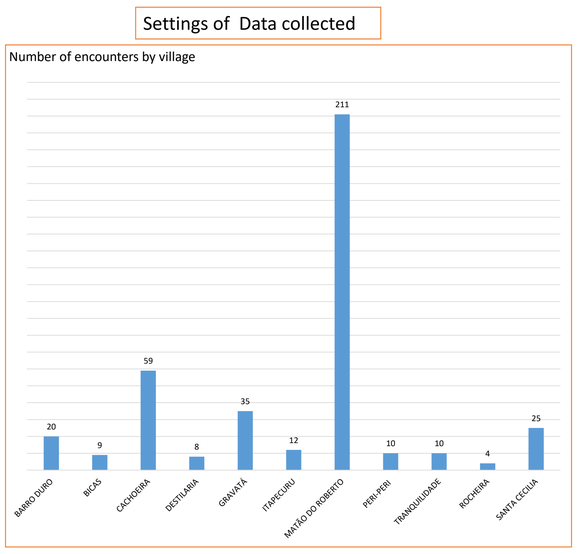
MELHORPAUSA: about menopause
HIPERDIA SIM Descontrolados NO: about education and prevention of complications
HORA H: The hour to speak about men's health
CAMINATA PARA UNA VIDA SALUDABLE : collective jogging

Names of the health education groups

Age distribution of Data collected on 403 patients



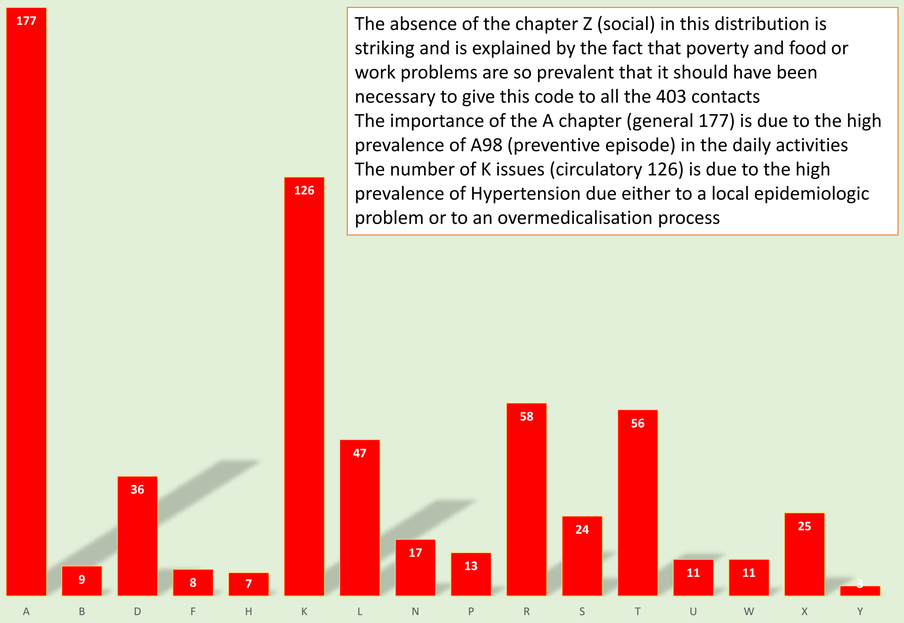
Settings of Data collected



Data collected shows this doctor's daily activities during two months, focusing on the variety of the problems addressed and the decisions to take. The clinical issues addressed are listed coded by ICPC-2. The special knowledge needed to develop the activity of family doctors is pointed by the use of Q-Codes, showing the various concepts addressed and about which the GP has to be knowledgeable. The importance of A98 (177 preventive episode) associates with QD23 (150 health education) and along with the number of collective health education sessions highlight the willingness of the doctor to transfer knowledge to the population. A community health education session is usually held at the beginning of each consultation session.

Home visits (39%) allow for the observation of health problems that could only be reduced with home health education or even collective meetings. They also make possible the uncover of factors involving social determinants of health and family relations that generate and/or perpetuate illness and disease. Mobile unit is a vehicle specially designed to serve as an outpatient consultation but it is little used (5% of contacts). It is interesting to observe the number of contacts related to quaternary prevention (QD44), since more than half of the contacts had addressed this subject.

Clinical issues managed by contact; 628 ICPC-2 on 403 contacts (1.5 diagnosis /contact)



The absence of the chapter Z (social) in this distribution is striking and is explained by the fact that poverty and food or work problems are so prevalent that it should have been necessary to give this code to all the 403 contacts
The importance of the A chapter (general 177) is due to the high prevalence of A98 (preventive episode) in the daily activities
The number of K issues (circulatory 126) is due to the high prevalence of Hypertension due either to a local epidemiologic problem or to an overmedicalisation process

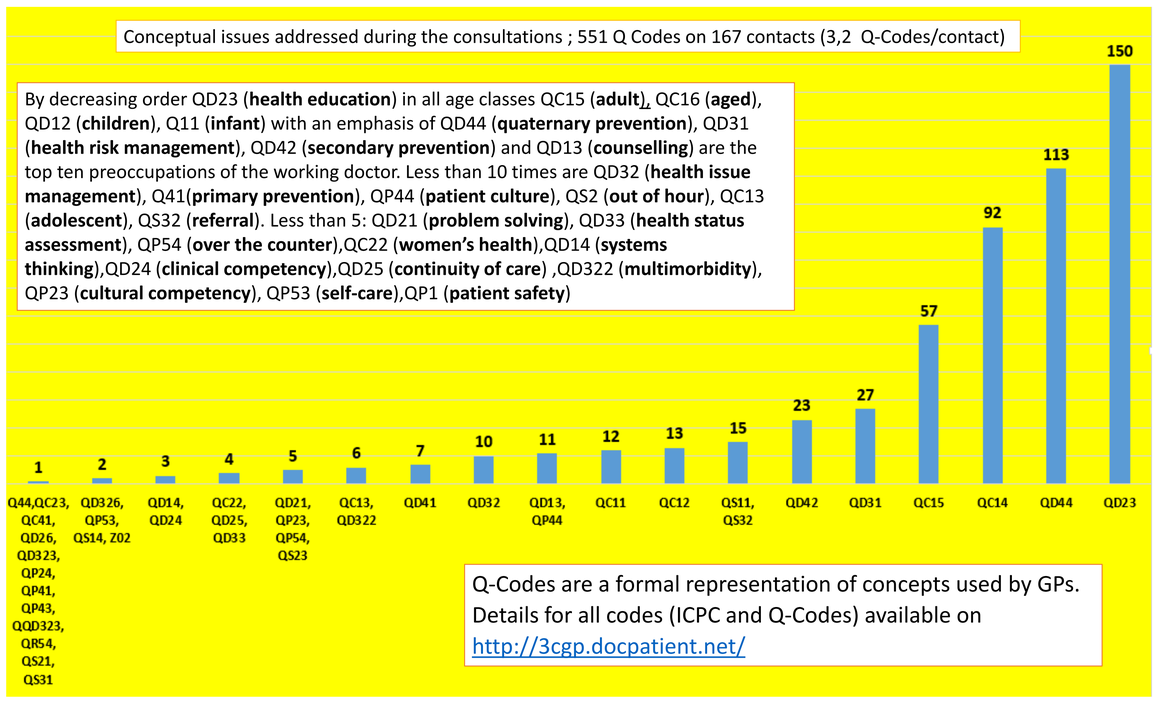
The mobile unit & health education session

A98 Preventive	168
K86 Hypertension	92
T90 Diabetes	46
K85 elevated blood pressure	23
R07 sneezing/nasal congestion	20
D96 worms/other parasites	11
R05 Cough	10
T89 Insuline dep. diabetes	10
L12 hand/finger symptom/complaint	8
NO1 Headache	8

Top ten diagnosis ICPC-2 on 403 contacts

Conceptual issues addressed during the consultations ; 551 Q Codes on 167 contacts (3,2 Q-Codes/contact)

By decreasing order QD23 (**health education**) in all age classes QC15 (**adult**), QC16 (**aged**), QD12 (**children**), Q11 (**infant**) with an emphasis of QD44 (**quaternary prevention**), QD31 (**health risk management**), QD42 (**secondary prevention**) and QD13 (**counselling**) are the top ten preoccupations of the working doctor. Less than 10 times are QD32 (**health issue management**), Q41(**primary prevention**), QP44 (**patient culture**), QS2 (**out of hour**), QC13 (**adolescent**), QS32 (**referral**). Less than 5: QD21 (**problem solving**), QD33 (**health status assessment**), QP54 (**over the counter**),QC22 (**women's health**),QD14 (**systems thinking**),QD24 (**clinical competency**),QD25 (**continuity of care**) ,QD322 (**multimorbidity**), QP23 (**cultural competency**), QP53 (**self-care**),QP1 (**patient safety**)



Q-Codes are a formal representation of concepts used by GPs. Details for all codes (ICPC and Q-Codes) available on http://3cgp.docpatient.net/

The study suffers from several limits. The first author is alone on the spot. The difficulties due to isolation and lack of infrastructure, internet, cellular phone signal, a professional support network, conditions to meet physical needs (eating, drinking, using the toilet), shorten the time available to care for all families and hinders the record with CIAP-2 and Q-Codes (which already overlaps the mandatory administrative work for the Ministry of Health). Reproducibility and accuracy of data could thus be questioned. It has not been possible to collect data on treatments but basic drugs are generally available for free. The working conditions and the general lack of accessibility of Primary care are surprising and are a call to invest massively in health infrastructures and manpower.

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https://orbi.uliege.be/handle/2268/239842

This study has been conducted by EH, working as doctor on the spot, with the help of MJ (in Charleroi, Belgium) and JH (in Rio de Janeiro, Brazil). This exchange by Internet (Mail, WhatsApp) highlights the immense possibilities of electronic communications in vocational training and teaching [5]

Bibliography:
1. Santos, L. M. et al. (2015) Cien Saude Colet, 20(11) . https://www.ncbi.nlm.nih.gov/pubmed/26602731
2. Chiarella, T.et al (2015). *Rev Br Educ Méd* http://dx.doi.org/10.1590/1981-52712015v39n3e02062014
3. Landsberg et al. (2012) *Cien Saude Colet, 17*(11), 3025-3036. https://www.ncbi.nlm.nih.gov/pubmed/23175309
4. Jamoulle, M et al.(2018). *Eur J Gen Pract, 24*(1), 68-73. https://www.ncbi.nlm.nih.gov/pubmed/29243572
5. Johnston, J., et al. (2014) *Rural Remote Health, 14*(3), 2870. https://www.ncbi.nlm.nih.gov/pubmed/25269934

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