

Cisp Club Octobre 2014

# Gestion de la connaissance Vers un système de concept en médecine de famille

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# Gérer l'information clinique c'est déjà difficile

- Voyez les logiciels
- Les classifications
- Les terminologies
- Mais au moins il y a des outils spécifiques à la médecine de famille. Soit DRC ou CISP
- Mais ils ne touchent que la clinique

# Les médecins de famille comme producteur de savoir

- En ne parlant que des congrès et de leurs abstracts
- Ce sont plusieurs milliers de communication par an et donc des milliers d'abstract

Non indexés, non répertoriés, inutilisable, travail perdu ex : posters ou site de wonca europe

# Expérience de 2007

- Lecture de 998 abstracts de Wonca Paris avant le congrès
- Indexation de chaque abstract avec la CISP, qui couvre 75% des items et exclusivement la clinique
- Développement d'un outil d'indexation des items non cliniques

# Tuberculose / recherche/ qualité de l'information



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## P05.056 - Do We Register Adequately The Precise Information In A Possible Contact With A Patient Of Tuberculosis?

Submitted by Anonymous (not verified) on Sun, 27/01/2013 - 13:49

**Conference:** [Wonca 2012 - Vienna](#)

### Author(s):

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**Aims:** To know if it is made a correct data collection in primary health care , when we have a possible contact with a patient with tuberculosis

**Material and methods:** Multicentral descriptive retrospective study of patients attending at three centers of primary care in the period between 2000-2010 , and that came for a possible contact with tuberculosis. 558 patients were included. We value the quality of the record of the information in the clinical history. SPSS statistical analysis

**Results:** We included 558 patients, 108 of them in pediatric age (19.4%). Questioned the existence of contact in 90.7%, but did not register the domain in which this contact occurs in 40.3% We do not ask the duration of the contact in 49,8 % of cases. It was interrogated on the existence of clinic of tuberculosis in all the patients. Of

# 2 outils un clinique / un metaclinique

ICPC

## Core Content Classification of GP/FM

### 3C GP/FM

3CGP/FM Core Content Classification of GP/FM © marc@jamouille.com ver 0.2 Oct. 2007

ICPC-2 – French International Classification of Primary Care – 2 <sup>nd</sup> Edition	Wenca International Classification Committee (WICC)	Sang. syst. hématop/immunol. B	Oeil F	Ostéo-articulaire L
<b>Procédures</b>				
01 Diagnostic médical simple				
02 Diagnostic médical simple par un autre professionnel				
03 Test de sensibilité				
04 Autre analyse de sang				
05 Autre analyse de urine				
06 Autre analyse de selles				
07 Cytologie frottée				
08 Autre analyse de liquide				
09 Examen de la lactation				
10 Examen de la vision				
11 Radiologie diagnostique				
12 Test d'effort				
13 Autre procédure diagnostique				
14 Vaccination/réévaluation vaccinale				
15 Diagnostic externe diagnostic				
16 Diagnostic externe diagnostic				
17 Diagnostic externe diagnostic				
18 Classification de la demande de soins				
19 Autre consultation externe				
20 Radiologie externe				
21 Examen externe				
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100 Examen externe				

Domain name	Category name	Code	Hazards	OH
	Sub-category name		Environmental	QH1
			Indoor pollution	QH11
			Outdoor pollution	QH12
			Biological	QH2
			Nuclear	QH3
<b>C Patient's categories</b>	QC			
Age groups	QC1			
Infants	QC11			
Children	QC12			
Adolescents	QC13			
Aging	QC14			
Gender issues	QC2			
Men's health	QC21			
Women's health	QC22			
Social high risk	QC3			
Ethnic subgroups	QC31			
Migrants & refugees	QC32			
Homeless	QC33			
In jail	QC34			
Addiction	QC4			
legal products	QC41			
street drugs	QC42			
gaming	QC43			
Assault	QC5			
battered women	QC51			
victims of abuses	QC52			
torture	QC53			
ritual mutilations	QC54			
<b>D Provider (Doctor) issues</b>	QD			
Communicator	QD1			
Encounter management	QD11			
Doctor patient relationship	QD12			
Counseling	QD13			
Systemic	QD14			
Caregiver	QD2			
Problem solving	QD21			
Comprehensiveness	QD22			
Health education	QD23			
Clinical skills	QD24			
Continuity of care	QD25			
Fail-safe care	QD26			
A & E	QD3			
Care manager	QD3			
Health risk management	QD31			
Health issue management	QD32			
Health status assessment	QD33			
Outcome assessment	QD34			
Genetic issues	QD35			
prevention	QD4			
Agent of	QD41			
Primary prevention	QD41			
Secondary prevention	QD42			
Tertiary prevention	QD43			
Quaternary prevention	QD44			
Complementary medicine	QD5			
Medico legal issues	QD6			
Professional image & identity	QD7			
Health provider personal life	QD8			
<b>E Ethics</b>	QE			
Personal views	QE1			
Professional ethics	QE2			
Bioethics	QE3			
Euthanasia	QE4			
Infotechs	QE4			
Confidentiality	QE41			
Informed consent	QE42			
<b>P Patient issues</b>	QP			
Diagnostic process	QP1			
Availability diag. process	QP11			
Safety diagnostic process	QP12			
Therapeutic process	QP2			
Availability of ther. process	QP21			
Over The Counter	QP22			
Comfort ther. process	QP23			
Safety of ther. process	QP24			
Practice & health care organisation	QP3			
Availability of health care	QP31			
Accessibility of health care	QP32			
Acceptability health care	QP33			
Safety of health care org.	QP34			
Participation	QP36			
Patient's views	QP4			
Patient demand	QP40			
Patient appraisal	QP41			
Patient satisfaction	QP42			
Patient autonomy/depend	QP44			
Patient cultural backgr.	QP45			
Patient expenses	QP46			
Patient health habits	QP5			
Nutrition	QP51			
Sexuality	QP52			
Self care & hygiene	QP53			
Travel	QP54			
<b>R R &amp; D tools</b>	QR			
Science philosophy	QR1			
Epidemiology	QR2			
Pharmacoeconomics	QR21			
Community health	QR22			
Functional status	QR23			
Research methods	QR4			
Qualitative study	QR41			
Research network	QR42			
Classification	QR5			
Scales & Questionnaires	QR6			
Health economy	QR7			
PHC planning & organisation	QR8			
<b>S Structure of practice</b>	QS			
Infrastructure	QS1			
Setting (incl. rural)	QS11			
Economy of practice	QS12			
Practice management	QS13			
Manpower	QS14			
Health Inform. Manag.	QS15			
Practice equipment	QS16			
Security	QS17			
Relationship	QS2			
Collaboration	QS21			
Referral/ counterservice	QS22			
Coordination of care	QS23			
Transdisciplinarity	QS24			
Professional bodies	QS3			

2007 8 domains

3C GP/FM

## Core Content Classification of GP/FM

- Patient issues
- Provider's issues
- Structure of practice
- Patient's categories
- Hazards
- Ethics
- Training, teaching
- R & D tools

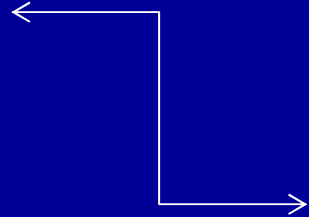
- ◆ QP Patient
- ◆ QD Doctor
- ◆ QS Structure
- ◆ QC Categories
- ◆ QH Hazards
- ◆ QE Ethics
- ◆ QT Knowledge
- ◆ QR Research

# 3C GP/FM

Domain

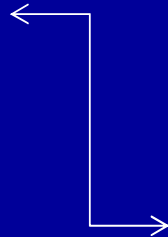
Knowledge Management

QT



Categories

Training QT4



Sub categories

Trainers & Supervisors QT43



# Assault QC5

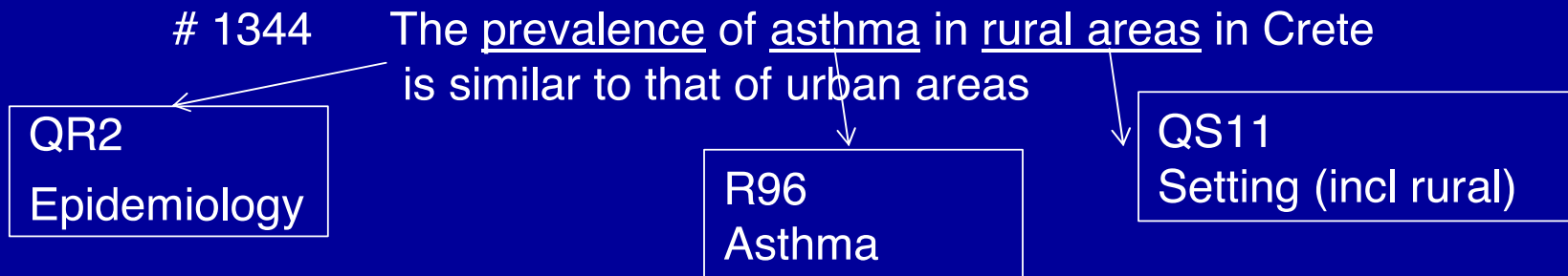
- battered women QC51
- victims of abuses QC52
- torture QC53
- ritual mutilations QC54

# Knowledge management QT

- Teaching QT1
- Training QT4
- Quality assurance QT5
- Editing QT6
- Reporting QT7

# Coding process

- Some abstract titles seems meaningfull and enough
- to make the codes easily

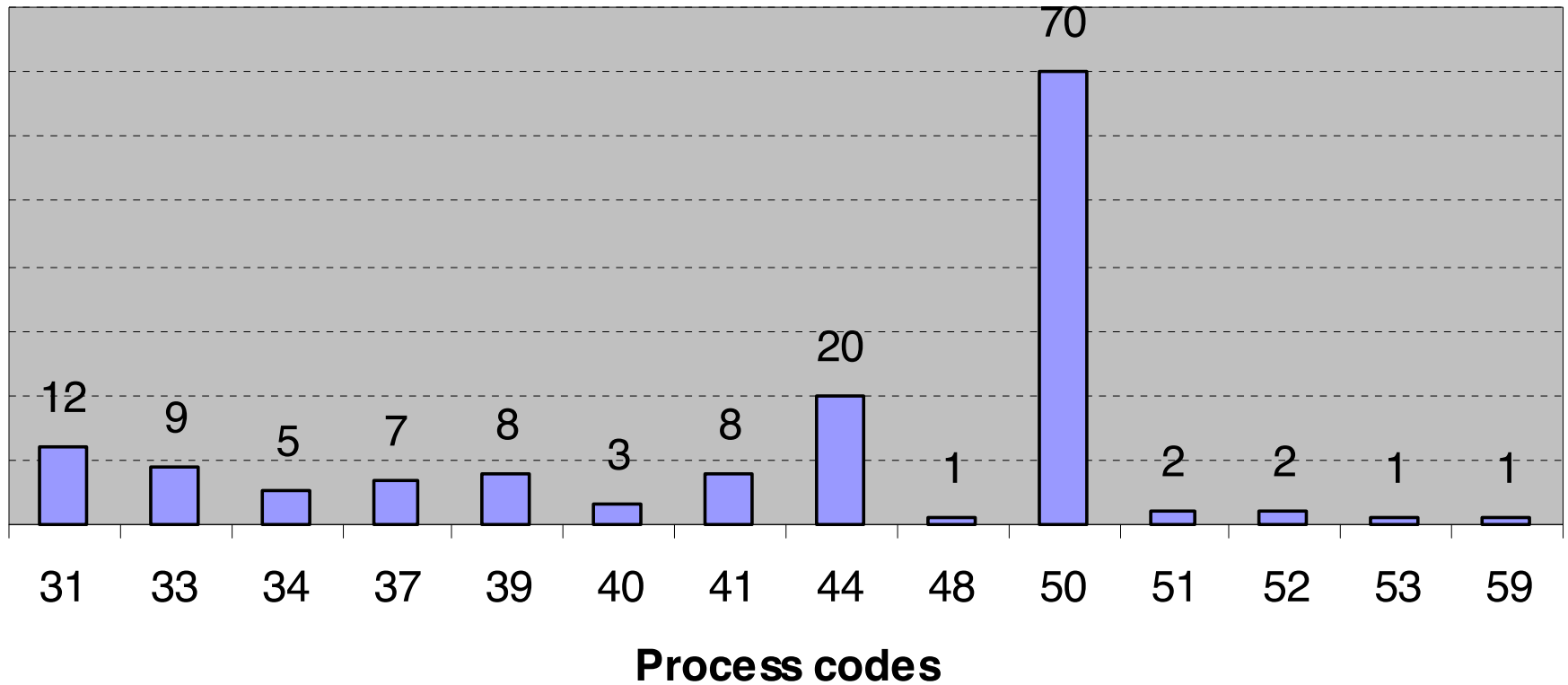


- Reading abstract add information

QC12  
Children

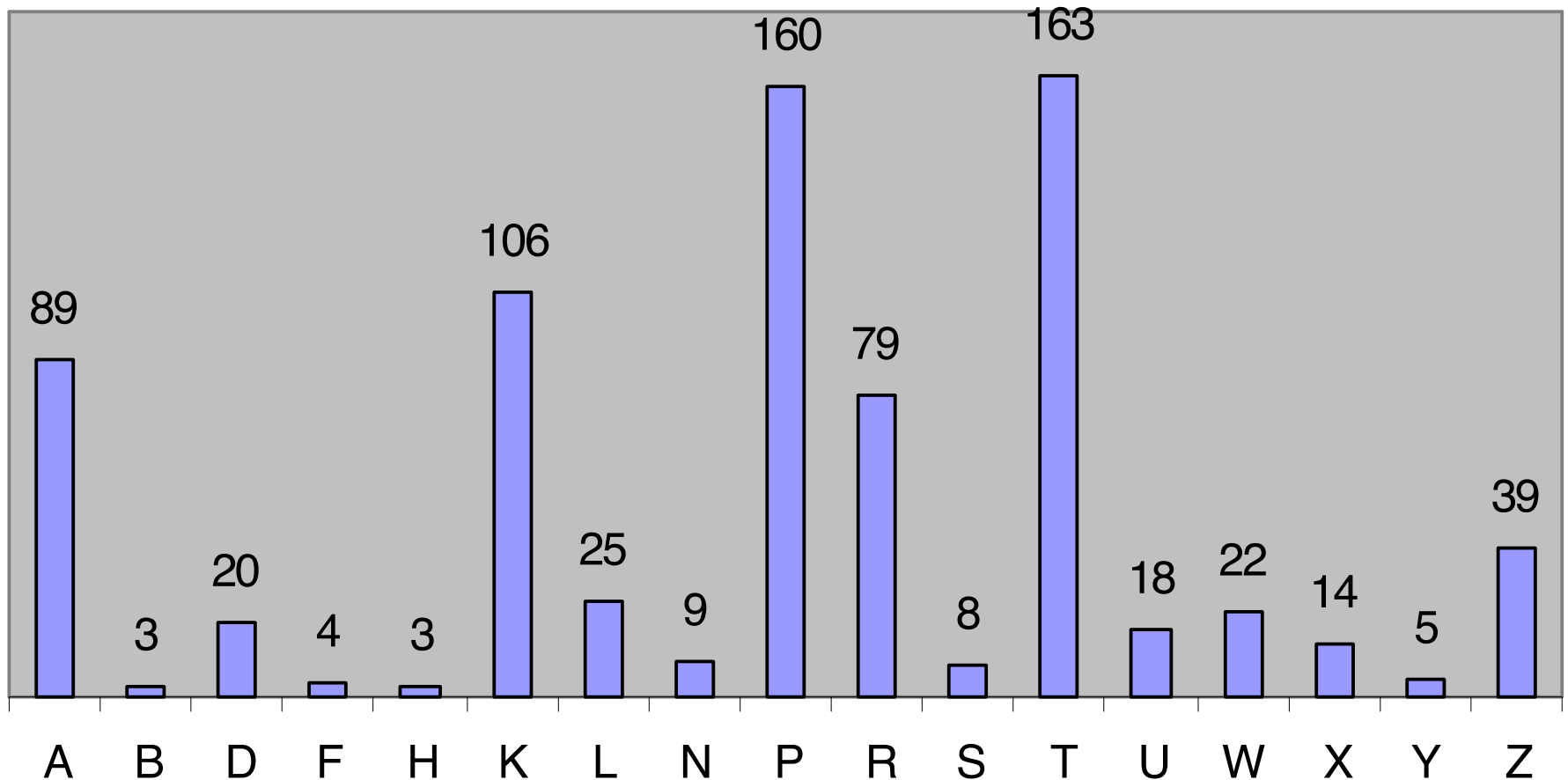
# Mainly drugs. Surprising 48

872 abstracts



# Surprising P & Z

**872 ABSTRACTS**



## First results with simple excell db

- example of QC32 : migrants  
On 23 occurrences
- ICPC associated codes

A	5
B	1
P	3
T	3
W	2
Z	4

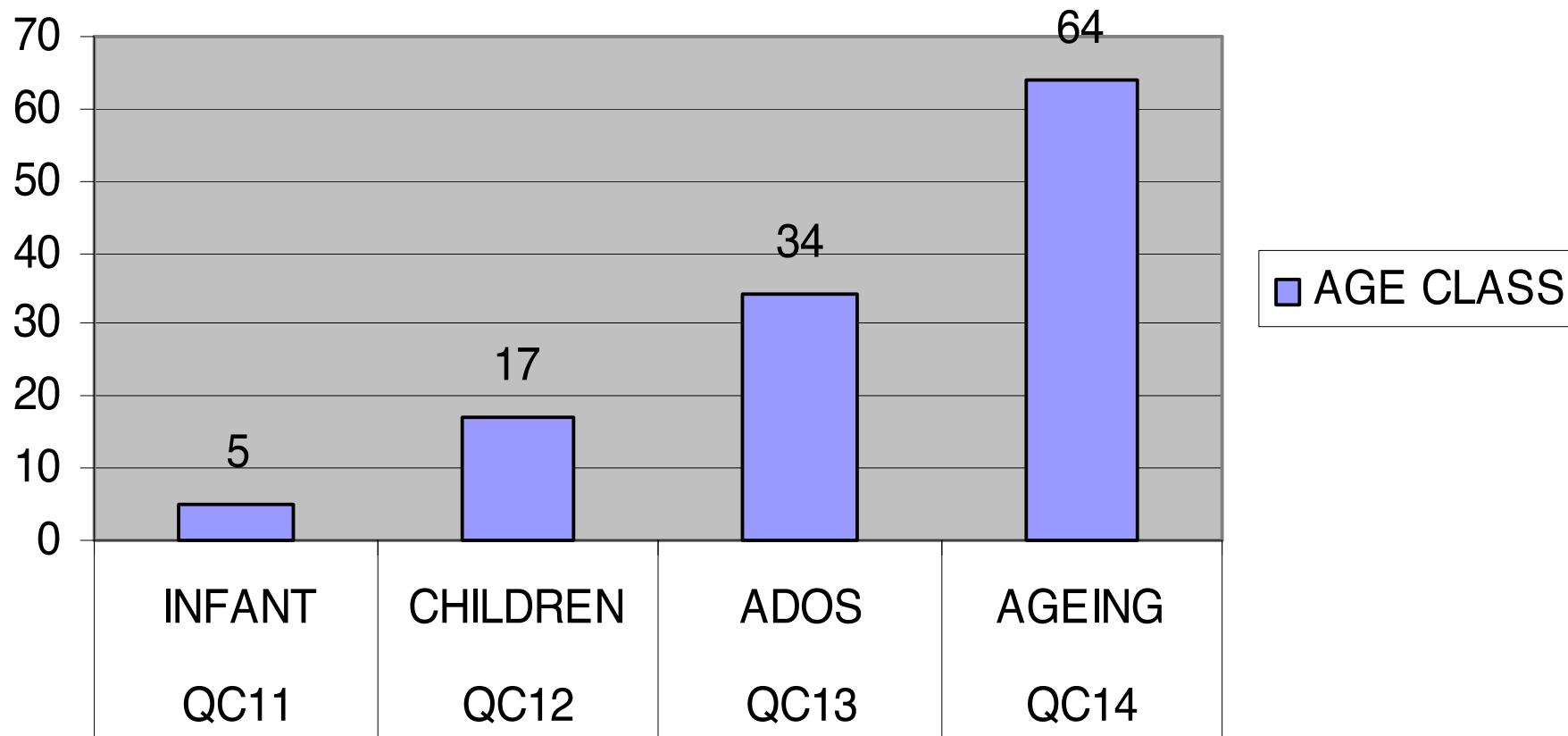
*41	Imaging
A44	immunization
B34	Blood analysis

chapter  
s

proces  
s

A23	Risk others
A70	Tuberculosis
A78	Infect dis others
A80	influenza
B90	HIV
P	Psycho
P15	Alcohol
P74	Acute stress
T	Nutrition
T89/T90	Diabetes
T90	Diabetes NID
W78	Pregnancy
W78	
Z01	Poverty
Z07	Litteracy
Z10	Health care access
Z25	Violence

## Wonca Paris 2007, on 872 abstracts



ASSOCIATION DES MEDECINS DE FAMILLE DU Portugal  
CONGRES ANNUEL; COVILHA 2012

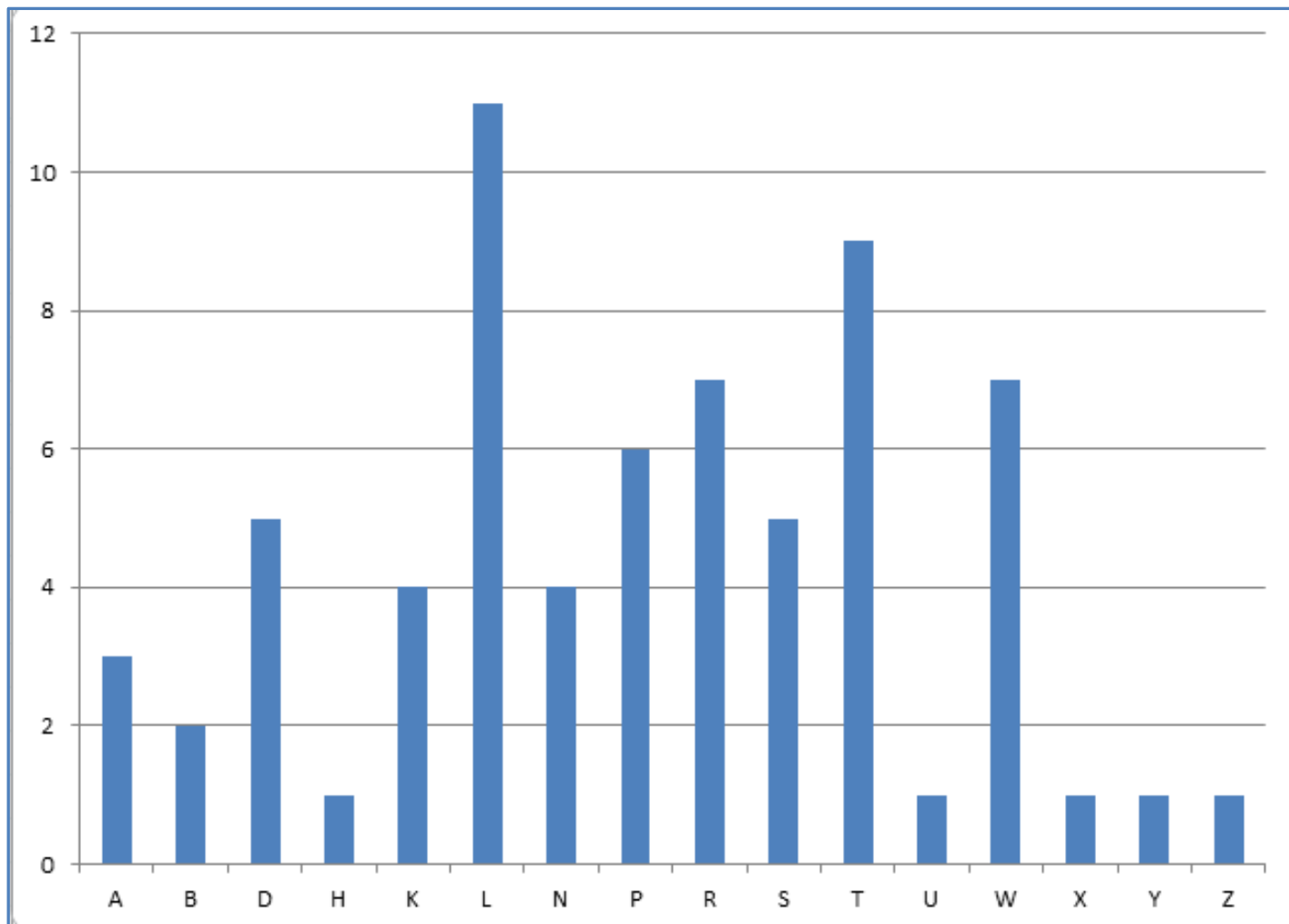


Figure 1 60 posters Covilha ; Distribution of clinical issues



Using 3CGP : one shows the attraction of doctor issues / More than 30 communications are dealing with Doctor oriented issue, mainly Disease management (QD). 25 are dealing with Knowledge management, all are Critical reading & review (QT). 8 are dealing with epidemiological research (QR)

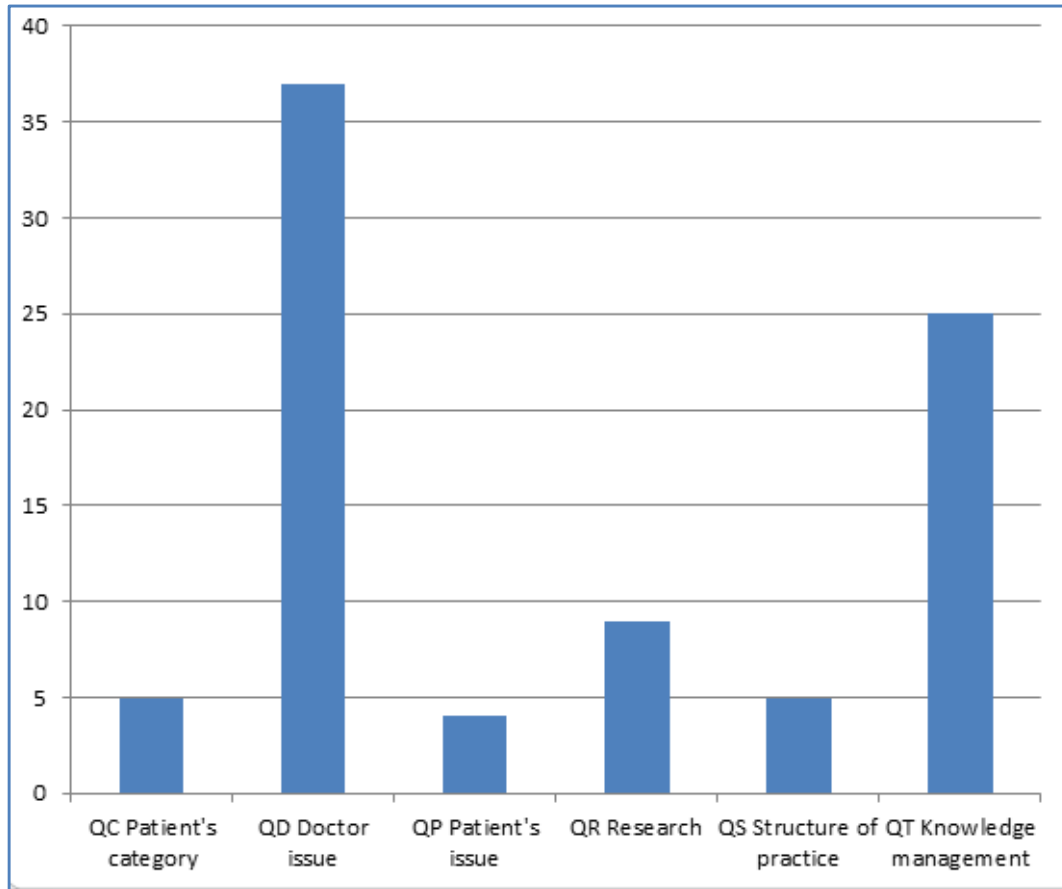


Figure 2 60 posters Covilha 3CGP 85 codes



# Wonca Europe

World family doctors. Caring for people.

Europrev

Euripa

VdGM



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Network & Collaborative Organizations

Journal

WONCA Europe Council

Library

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## Abstracts

Author(s)

Title contains

Text contains

Conference

Apply

- Wonca Europe Congresses
  - Wonca 2016 - Copenhagen
  - Wonca 2015 - Istanbul
  - Wonca 2014 - Lisbon
  - Wonca 2013 - Prague
  - Wonca 2012 - Vienna
  - Wonca 2011 - Warsaw
  - Wonca 2010 - Malaga
  - Wonca 2009 - Basel
  - Wonca 2008 - Istanbul
  - Wonca 2007 - Paris
  - Wonca 2006 - Firenze
  - Wonca 2005 - Kos
  - Wonca 2004 - Amsterdam
  - Wonca 2003 - Ljubljana
  - Wonca 2002 - London
  - Wonca 2001 - Tampere
  - Wonca 2000 - Vienna
  - Wonca 1999 - Palma de Mallorca
  - Wonca 1997 - Prague
  - Wonca 1995 - Strasbourg

GPs are working hard to gain the right to communicate during congresses

Often more than 50% of this work is not subject to publication  
{ 55% VanRoyen 2010, 48% Hummers-Pradier 2007, 65% Post 2013}.

Lack of indexing system

50% of specific knowledge lost

This database contains all the abstracts presented during a WONCA Europe conference since 1995!

Conference

Title

Author(s)

Text

## Existing Indexing systems

MeSH

25.000

*“Because MeSH originally was intended for use with clinical documents, the problem has always been how to adapt it to cover the range of a family physician’s non-clinical activities”*  
{Dunikowsky 2014, personal comm.}

FAMLI 1980 - 1992

{Fitzgerald1980} {Dunikowsky 1992}

Pre Internet age / Ian R. McWhinney initiative

List of specific descriptors for GP/FM

MeSH related / Wonca backed

ICPC

Looks convenient for clinical themes including process

Don’t fit for non clinical issues

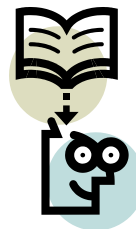
Not proven

# Looking for an indexing system for non clinical theme

1987

Seminal ideas of Prof Henk Lamberts † UVA  
Q-Codes  
Pre Internet age  
Used with ICPC to code bibliography

Books



DBase



2007

Core Content Classification in GP/FM 3CGP  
Empirical construct , analyse of Wonca 2007 abstracts  
Followed in 2013 by analyse of APMGF Covilha abstracts

Excel



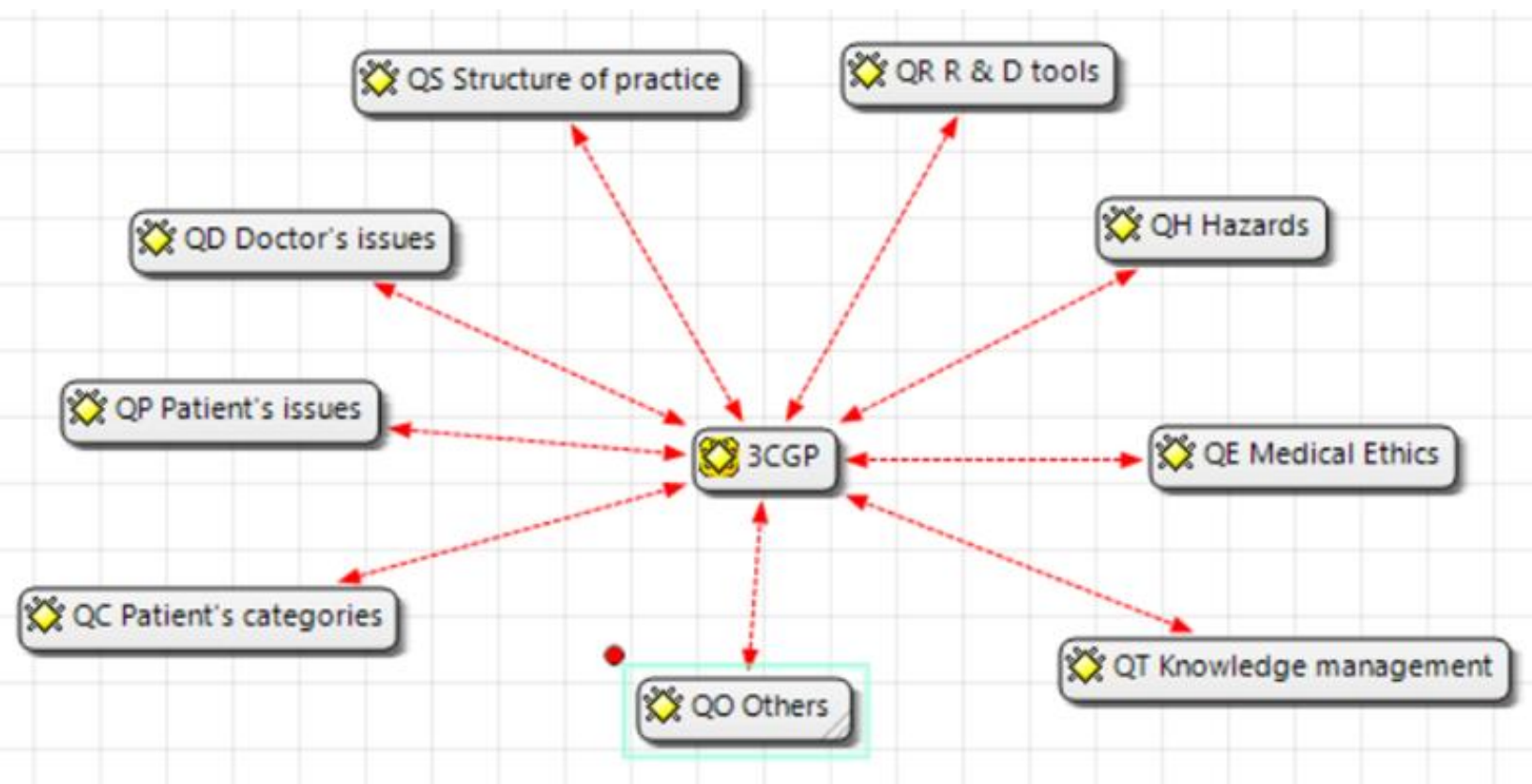
SQL

2014

Empirical construct (followed)  
Using Content Analysis Software ATLAS.ti  
4 more congresses ( .fr. 2013 & 2014 / .ch 2014 / .be 2014. )

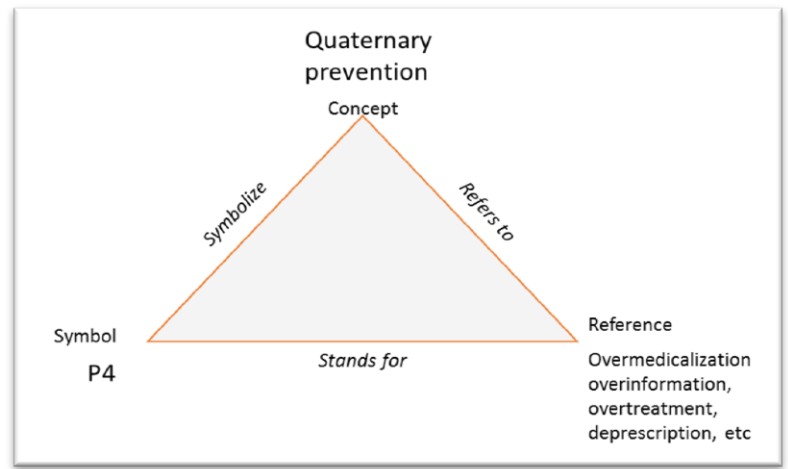


Semantic web

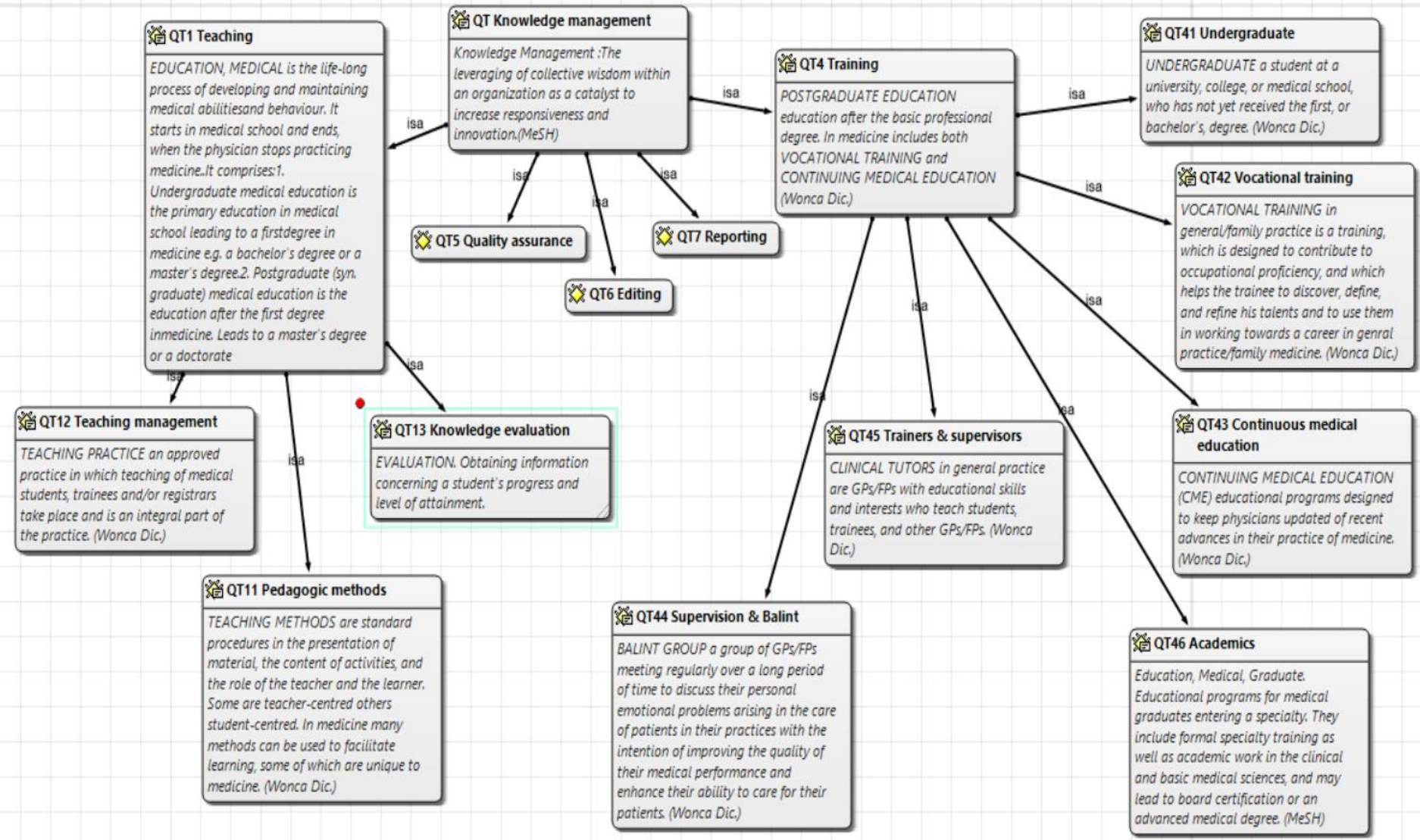


### 3CGP content

Eight domains and one rag bag, so far the best main domains I can observe on a conceptual basis



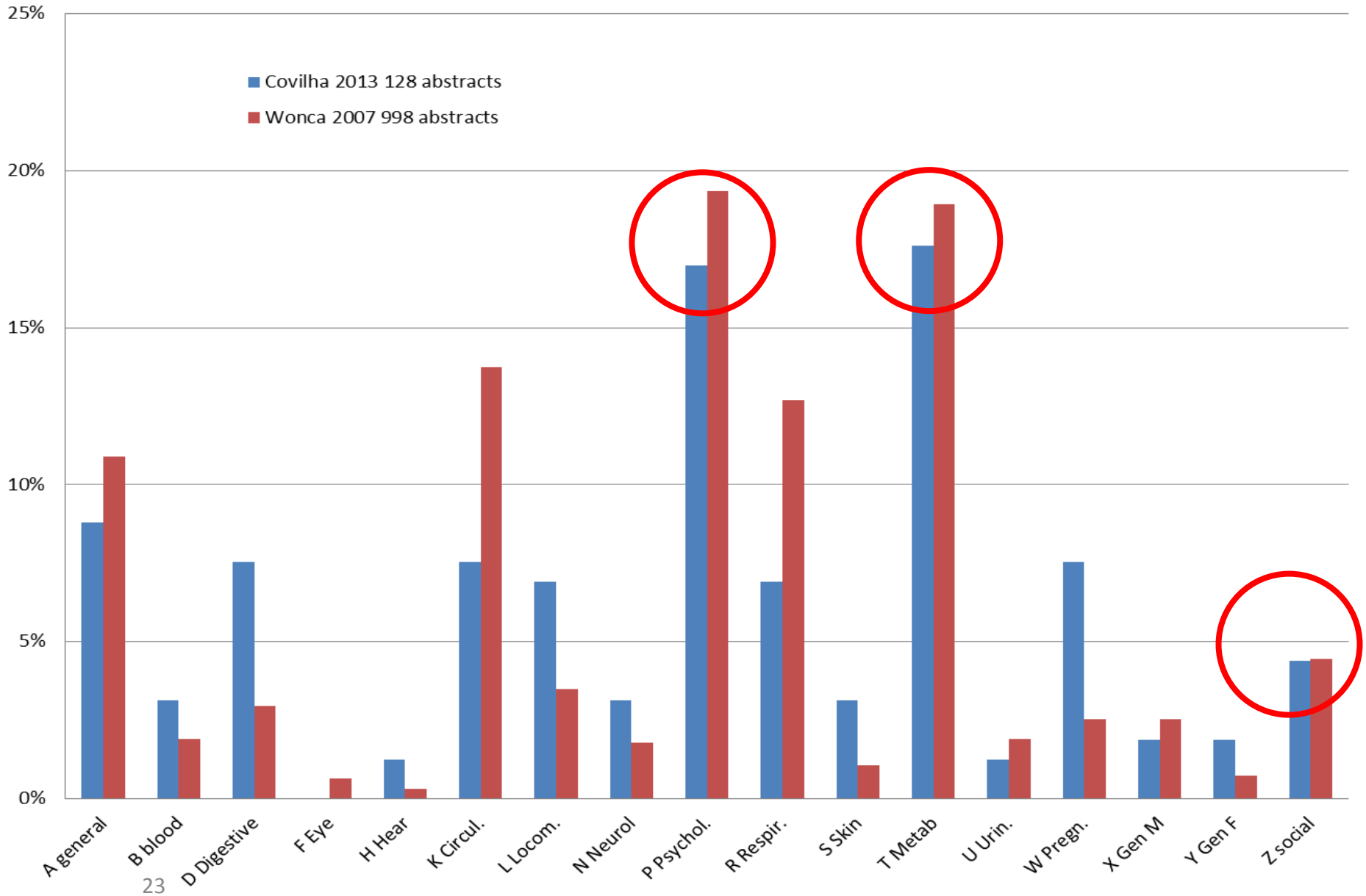
{Ogden & Richards 1923}



### 3CGP version 0.3 Opening of QT with content

Source of definitions ; Wonca Dictionary & MeSH

# ICPC Chapters distribution in %



### 3CGP view / Excel method

■ 998 abstracts Wonca 2007

■ 128 abstracts Covilha 2013

#### QC Categories de patient

QD Doctor's view

QE Ethical issues

QH Hazard

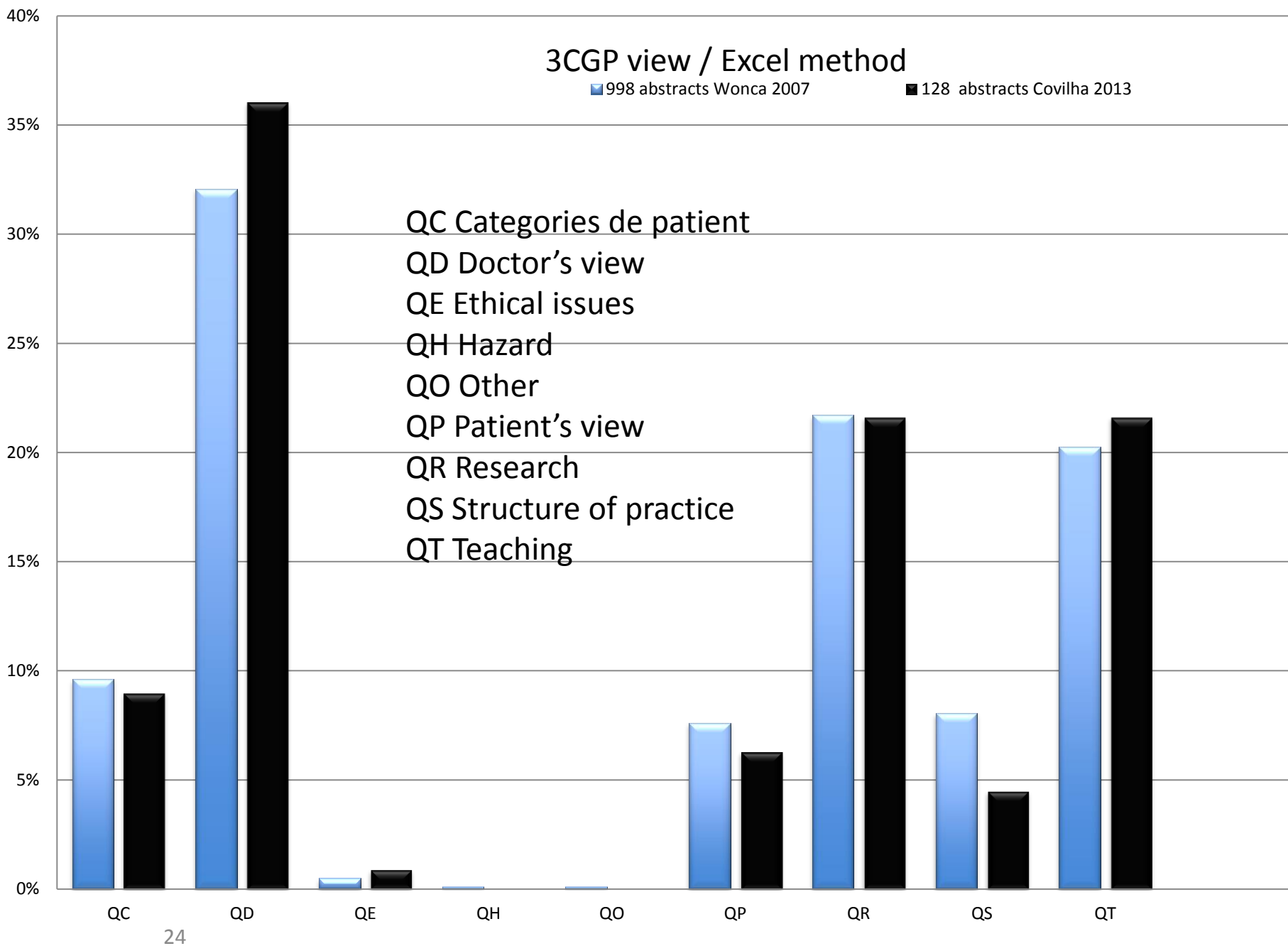
QO Other

QP Patient's view

QR Research

QS Structure of practice

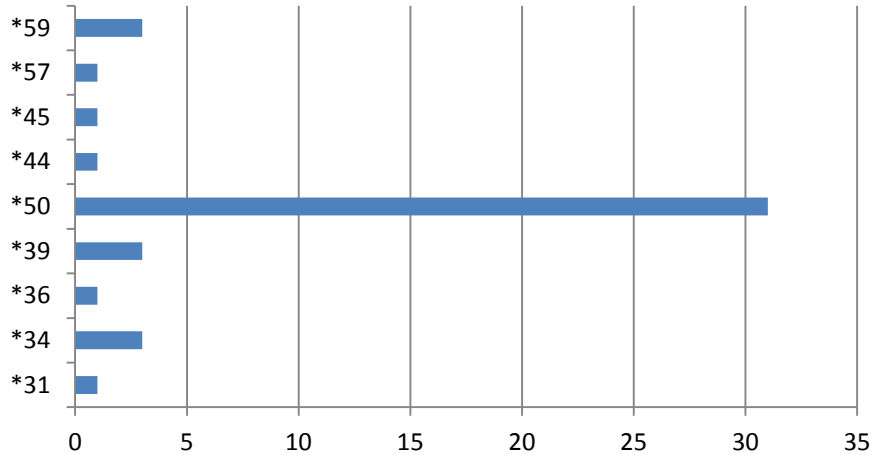
QT Teaching





# Some ICPC views / Excel method

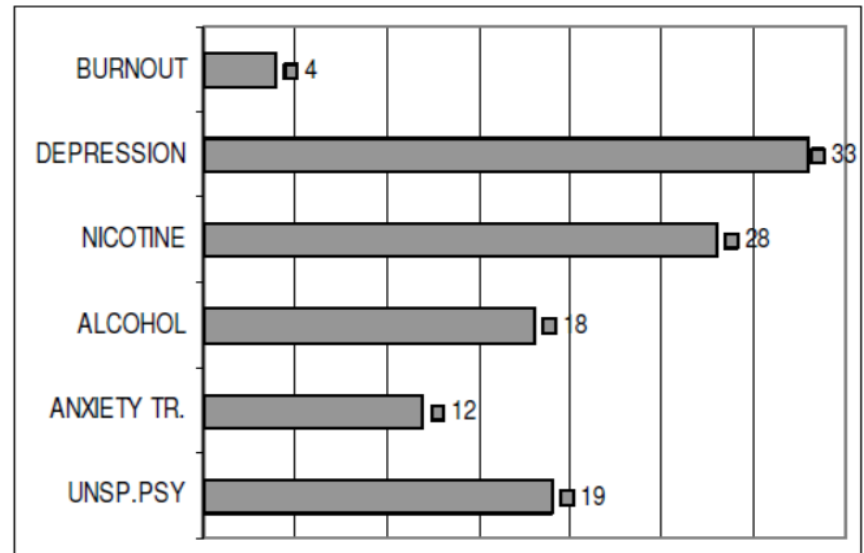
ICPC Process On 128 abstracts. Covilha 2013

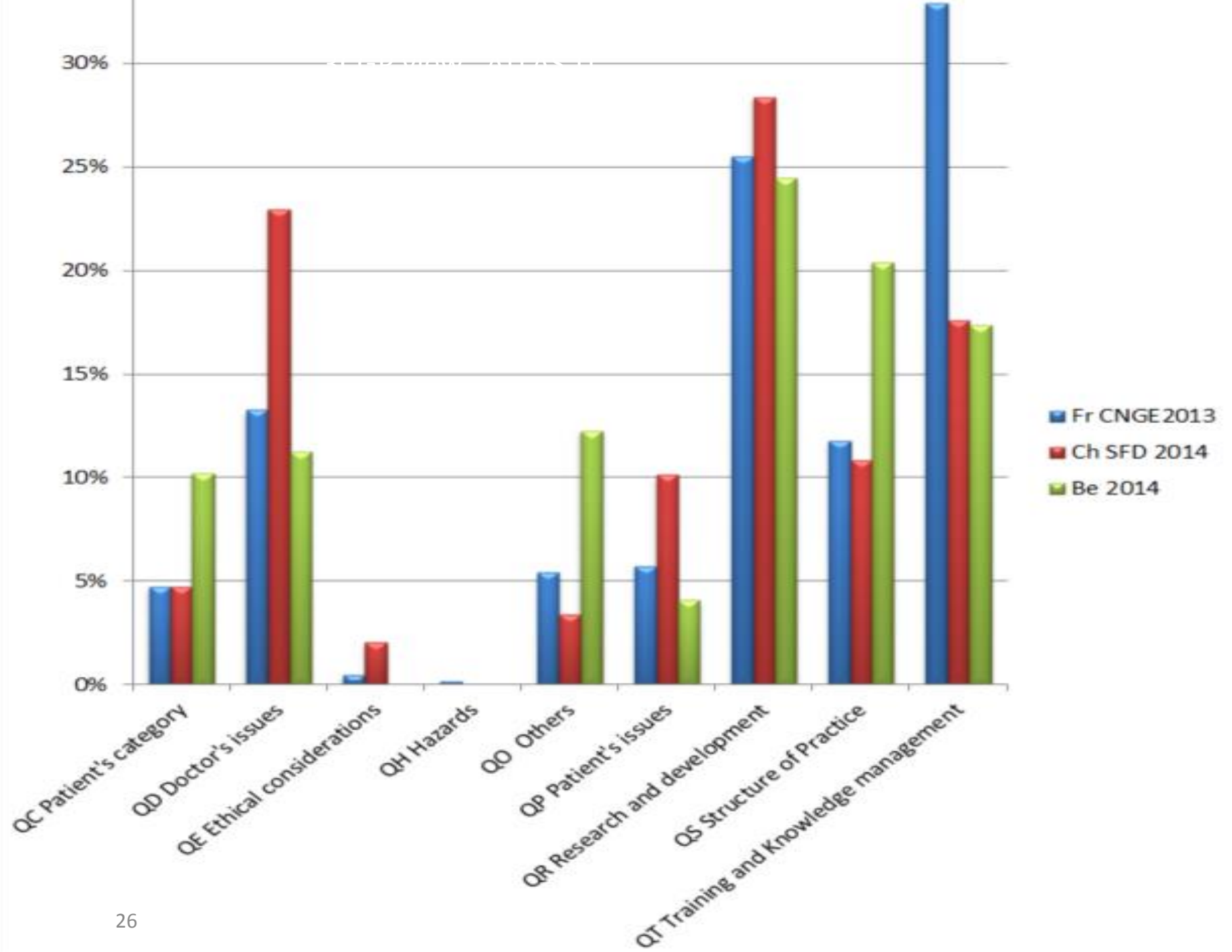


Portuguese GPs like to discuss drug issues

The workload of the GPs is heavy in the Psychological field

(998 abstracts Paris 2007)





◆ Z Social Problems	1
◆ Z01 Poverty/financial problem	5
◆ Z05 Work problem	3
◆ Z08 Social welfare problem	1
◆ Z10 Health care system problem	1
◆ Z18 Illness problem with a child	1
◆ Z22 Illness problem parent/family	1
◆ Z25 Assault/harmful event problem	1

Figure 28 Social problems. Coding of 205 abstracts Clermont 2013

◆ P Psychological	2
◆ P06 Sleep disturbance	1
◆ P15 Chronic alcohol abuse	1
◆ P18 Medication abuse	3
◆ P19 Drug abuse	2
◆ P70 Dementia	3
◆ P74 Anxiety disorder/anxiety state	1
◆ P76 Depressive disorder	3

Figure 29 Psychological problems Coding of 205 abstracts Clermont 2013

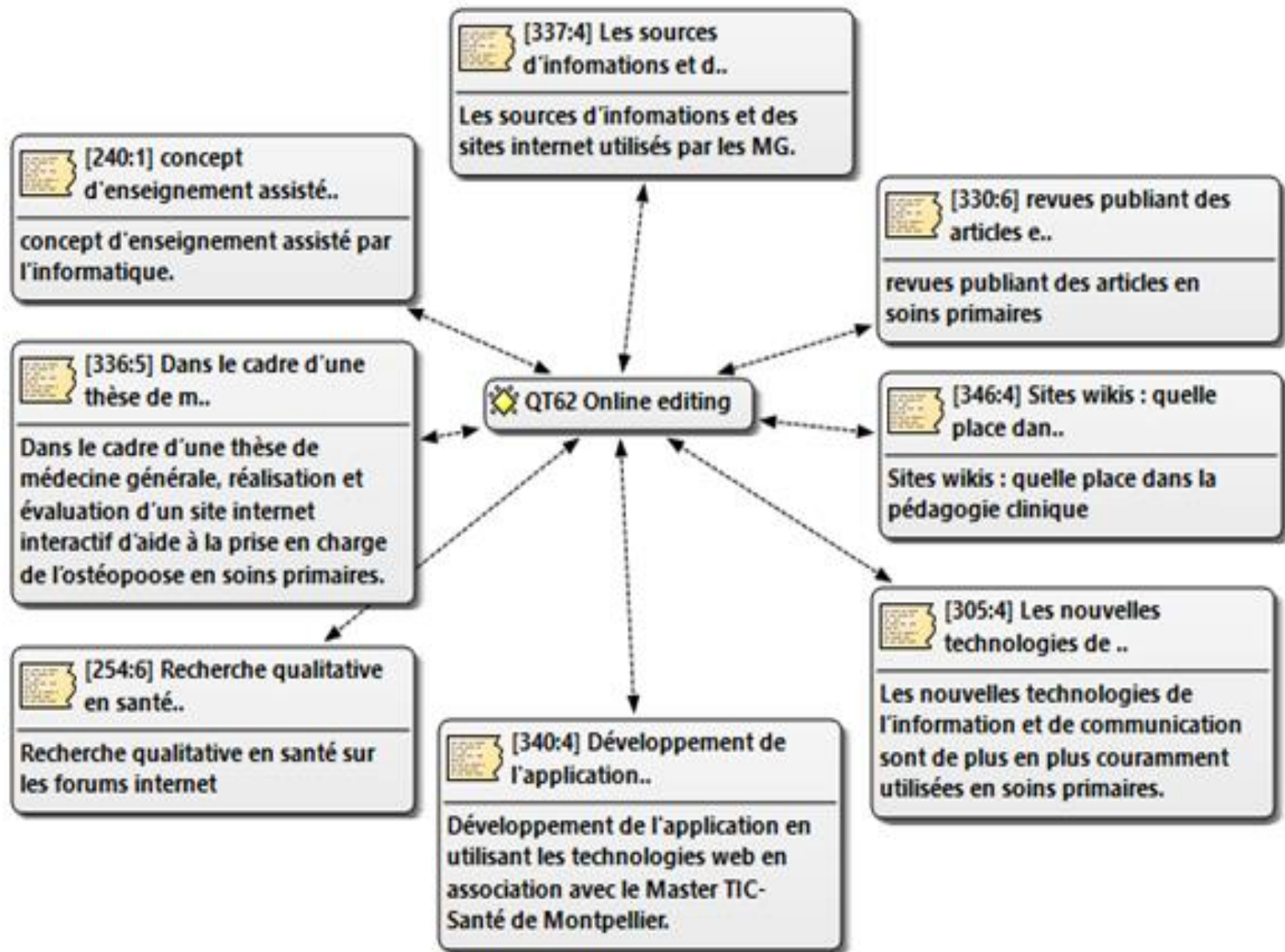


Figure 35 QT62 (online editing) and their verbatim. 205 abstracts Clermont 2013

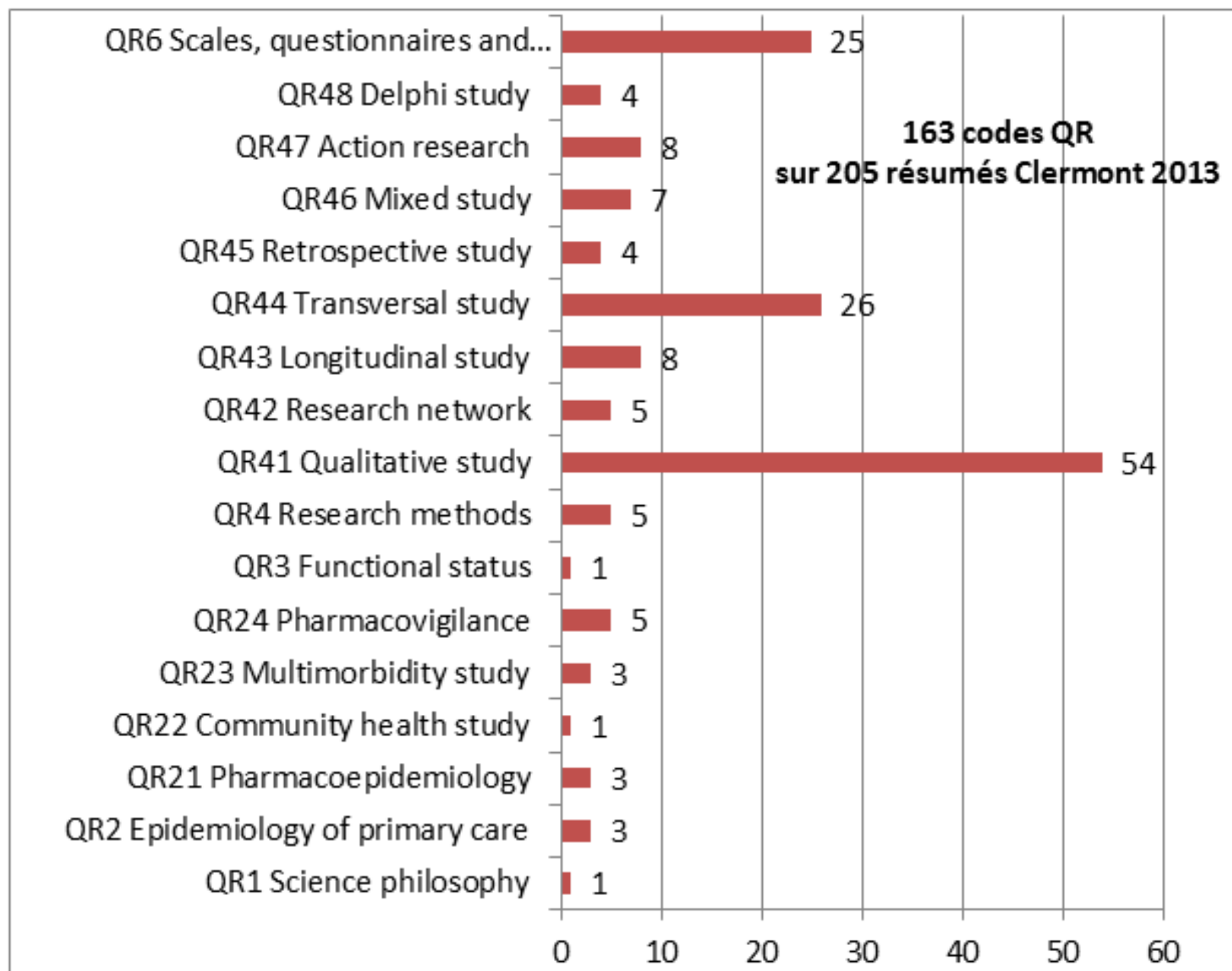
QC12 Children	1
QC13 Adolescents	1
QC16 Ageing	2
QC23 Sex difference	2
QC32 Migrants & refugees	1

QE Medical Ethics	1
QE31 Euthanasia	1
QE41 Confidentiality	1

QD1 Communicator	1
QD12 Doctor patient relationship-	2
QD26 Palliative care	3
QD31 Health risk management	3
QD32 Health issue management	4
QD41 P1 Primary prevention	3
QD42 P2 Secondary prevention	3
QD43 P3 Tertiary prevention	1
QD441 P4 Overmedicalisation	2
QD5 Complementary medicine	4
QD51 Homeopathy	4
QD7 Professional image & identity-	1
QD8 Health provider personal satisfaction	3

QP2 Therapeutic process	4
QP23 Comfort of therapeutic process	1
QP24 Safety of therapeutic process	2
QP31 Availability of health care	1
QP41 Patient appraisal	2
QP42 Patient satisfaction	1
QP43 Patient knowledge	1
QP53 Self-care & hygiene	1
QP61 Social networking	1

Figure 43 SFD 2014 3CGP (QC patient's categories, QE Ethics , QD doctor's issues, QP patient's view)



interesting / useful?/ needed? / reproducibility?/ empirical / observer bias / one man show

## Next steps

### Classification field

**Looking for a consensus about 3CGP content**

**Building and field testing 3CGP and ICPC**

### Ontological field

**Building a NLP based reference terminology  
mapped to 3CGP & ICPC**

**Preparing semantic tools**

congres\_management / smartphone\_app / profesional\_identity / researchers\_network / .....

# welcome !

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Thanks to so many friends

B Bentsen † / H Lamberts † / I Okkes / N Bentzen / JK Soler / H Britt /  
K van Boven / G Gusso / L Letriliard / E Cardillo / J Roumier / M Warnier /  
M Roland / L Romary / C Romain / R Vander Stichele / M Vanmeerbeek /  
Didier Giet / MA Donneau / I Kunnamo / L Dunikowski / M Labrecque /  
S Darmoni / J Grosjean / D Pinto / L Santiago / FE Gomes / Carl Steylaert  
and all MERITERM & WICC members

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