

**Comparaison de deux modes de préparation des médicaments dans une MRS en Communauté germanophone :
impact quantitatif et qualitatif sur la pharmacothérapie**

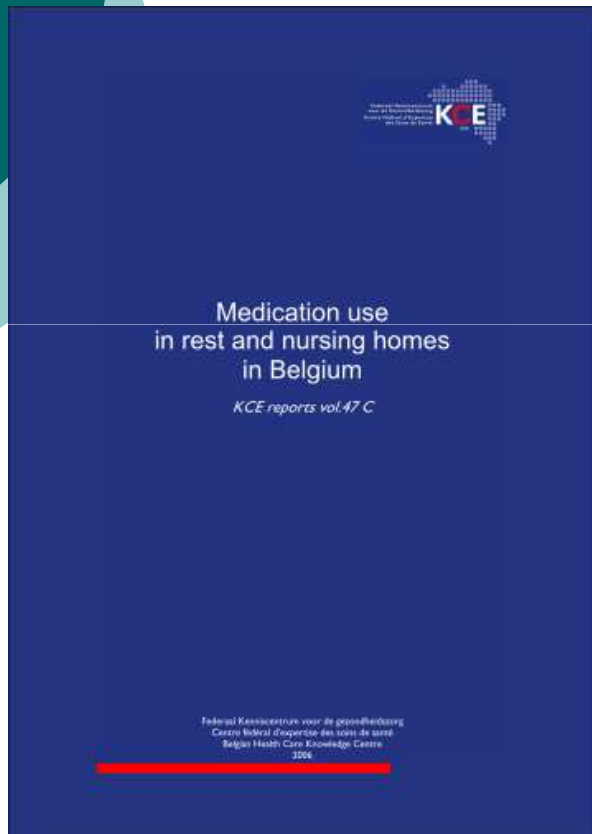
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Introduction



- PHEBE-study (Prescribing in Homes for the Elderly in Belgium) KCE 2006
- Large consumption of drugs in Nursing Home
- High costs (140 €/patient/month, 50 = patient, 90 = INAMI/RIZIV)
- Quality of prescription (ACOVE, Beers, BEDNURS)
 - Overuse (BZD, antidepressants, ...)
 - Underuse (in heart failure, prophylaxis, ...)
 - Duplication of treatment
 - ...

Medication use in rest and nursing homes in Belgium, KCE reports vol.47 C



Introduction

- Failures of distribution systems
 - Distribution errors (transcription, reading, ...)
 - Administration errors (patient, dose, time, crushing, ...)
 - => unit-doses or pill-boxes
- Worsening factors
 - Poly-pathology
- Positive factors
 - Drug formulary
 - Coordinating physician
 - Active role of local pharmacist or hospital pharmacist

Introduction


- Nursing homes = economical value
- Discounts - concurrence
- Robots => centralization





Introduction

- AR/KB 2009 – Instructions for Pharmacists
 - Pharmaceutical Care
 - Quality !
 - Rationnal and appropriate use of medecines
 - Optimal communication with physicians and nurses
 - Availability of referent pharmacist
- + proximity, urgent delivery, human relationship, ...



Comparaison de deux modes de préparation des médicaments dans une maison de repos et de soins en Communauté germanophone : impact quantitatif et qualitatif sur la pharmacothérapie

Mémoire de fin d'étude présenté par Béatrice Schroeder
En vue de l'obtention du titre de Master en Santé Publique
Finalité gestion des institutions de soins



Context of the study

- Nursing home in the German-speaking Community
- Drug distribution system in transition
- Pill-boxes prepared
 - By the nurse
 - By the community pharmacist



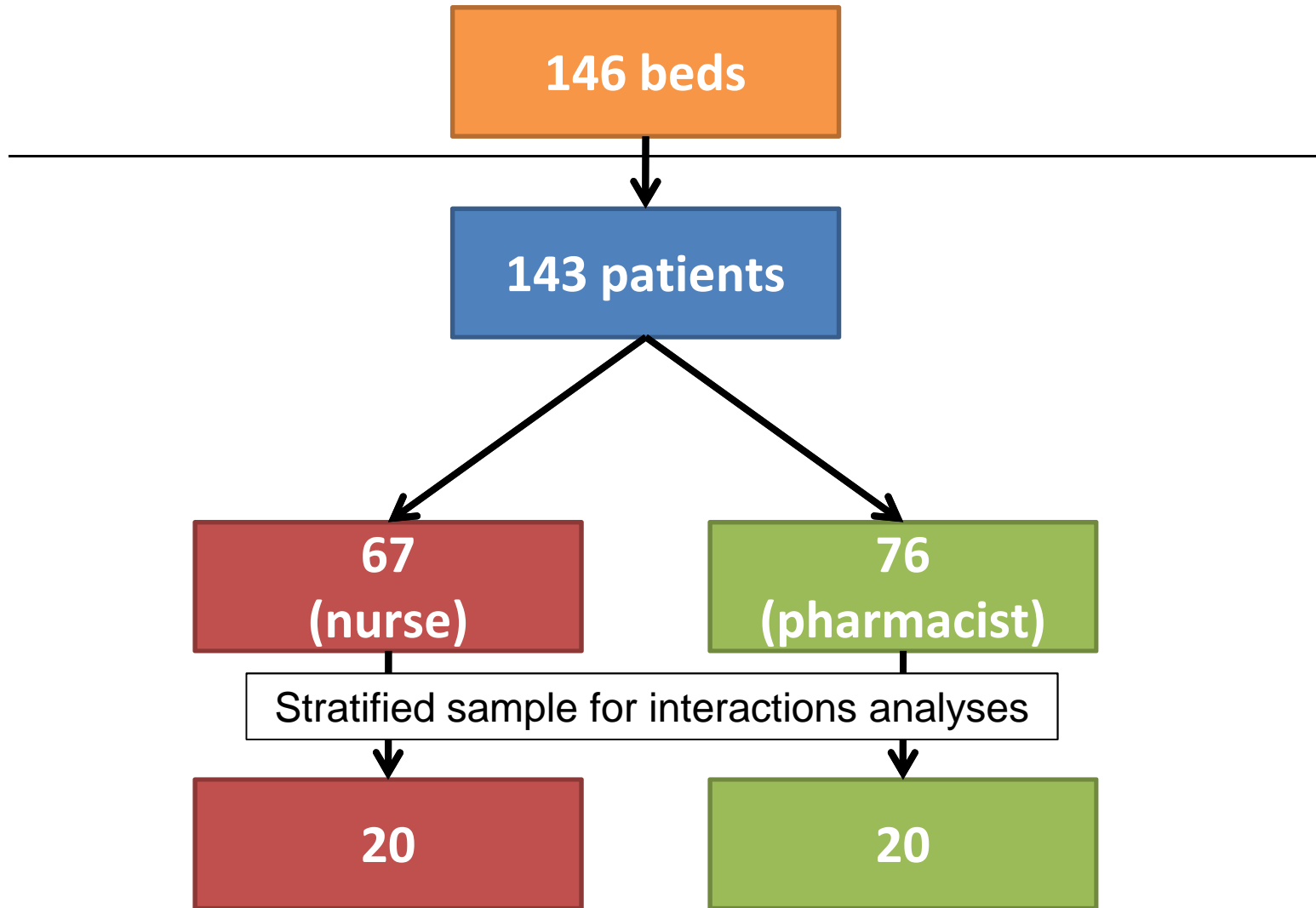
Aim of the study

Observational study to compare these 2 systems

- Quantitatively
 - Number of drugs
- Qualitively
 - Potentially Inappropriate Medication (Beers criteria)
 - Interactions (Micromedex)
- Economically
 - Daily cost for the patient

Fick DM et al.— Updating the Beers Criteria for Potentially Inappropriate Medication Use in Older Adults: Results of a US Consensus Panel of Experts. *Arch Int Med*, 2003, 22, 2716-1724.

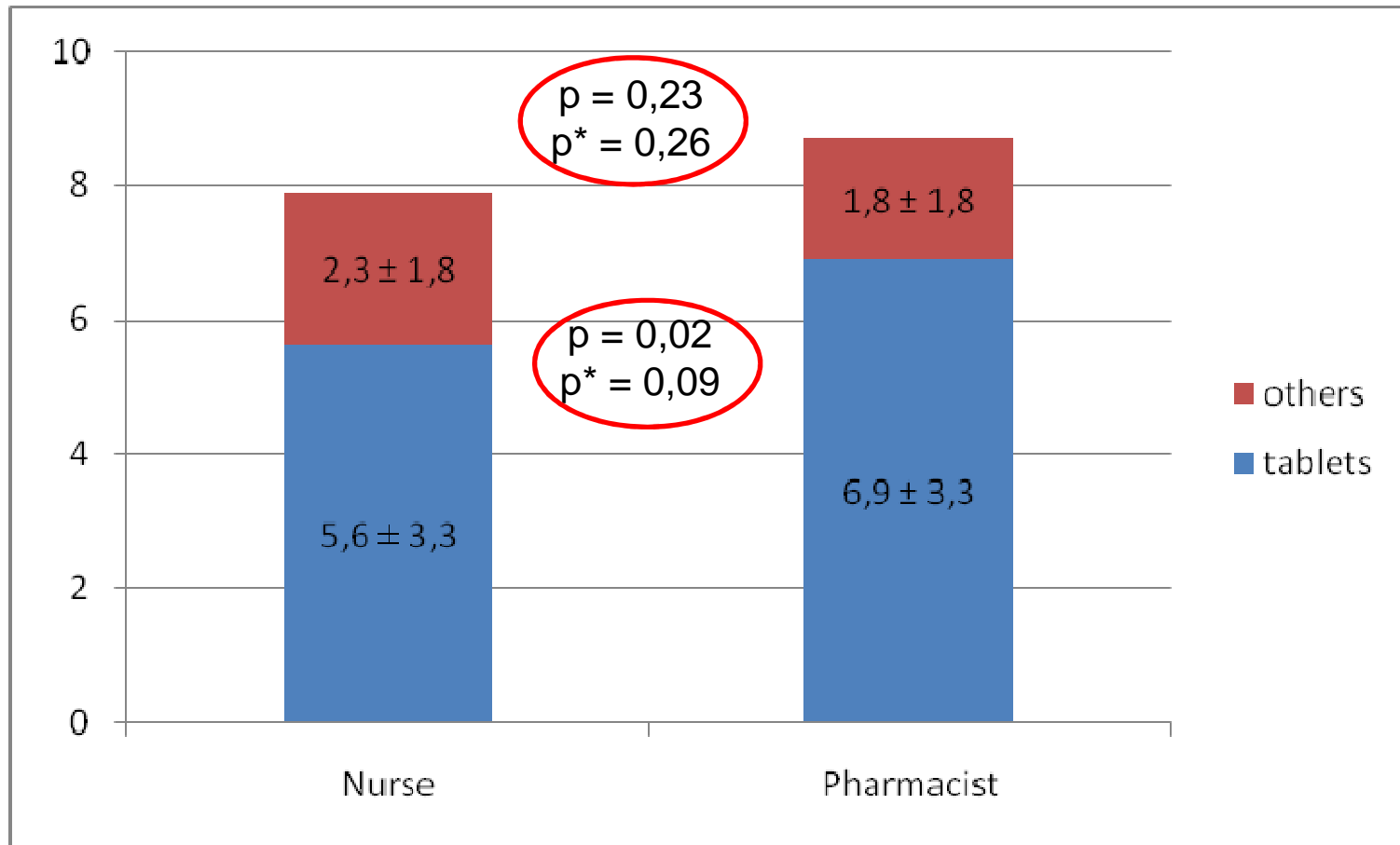
Laroche ML et al.— Médicaments potentiellement inappropriés aux personnes âgées : intérêt d'une liste adaptée à la pratique médicale française. *Rev méd int*, 2009, 7, 592-601.



Description of the population

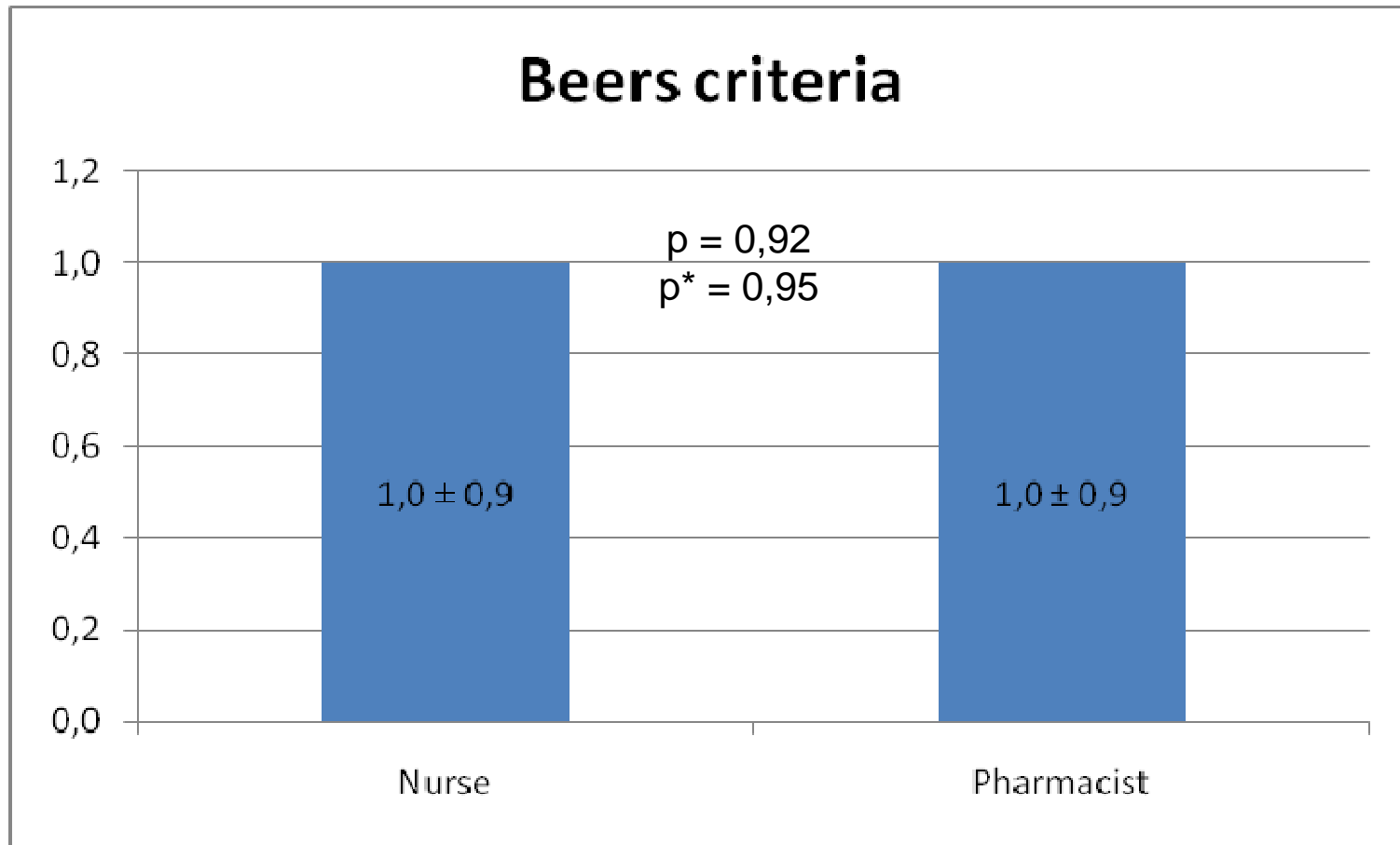
Variable	Groupe contrôle (n = 67)	Groupe intervention (n = 76)	p-value
Sexe			0,04
Homme	15 (22,4)	29 (38,2)	
Femme	52 (77,6)	47 (61,8)	
Age (M ± SD)	83,1 ± 8,2	81,8 ± 8,4	0,36
Age (étendue)	(58-98)	(57-99)	
Séjour (médiane)	46,0	31,0	0,12
Séjour (étendue)	(0-192)	(0-134)	
Catégorie de Katz			0,001
O (%)	5 (7,8)	12 (15,8)	
A (%)	4 (6,3)	24 (31,6)	
B (%)	13 (20,3)	17 (22,4)	
C (%)	3 (4,7)	9 (11,8)	
CD (%)	39 (60,9)	14 (18,4)	

Number of drugs/patient



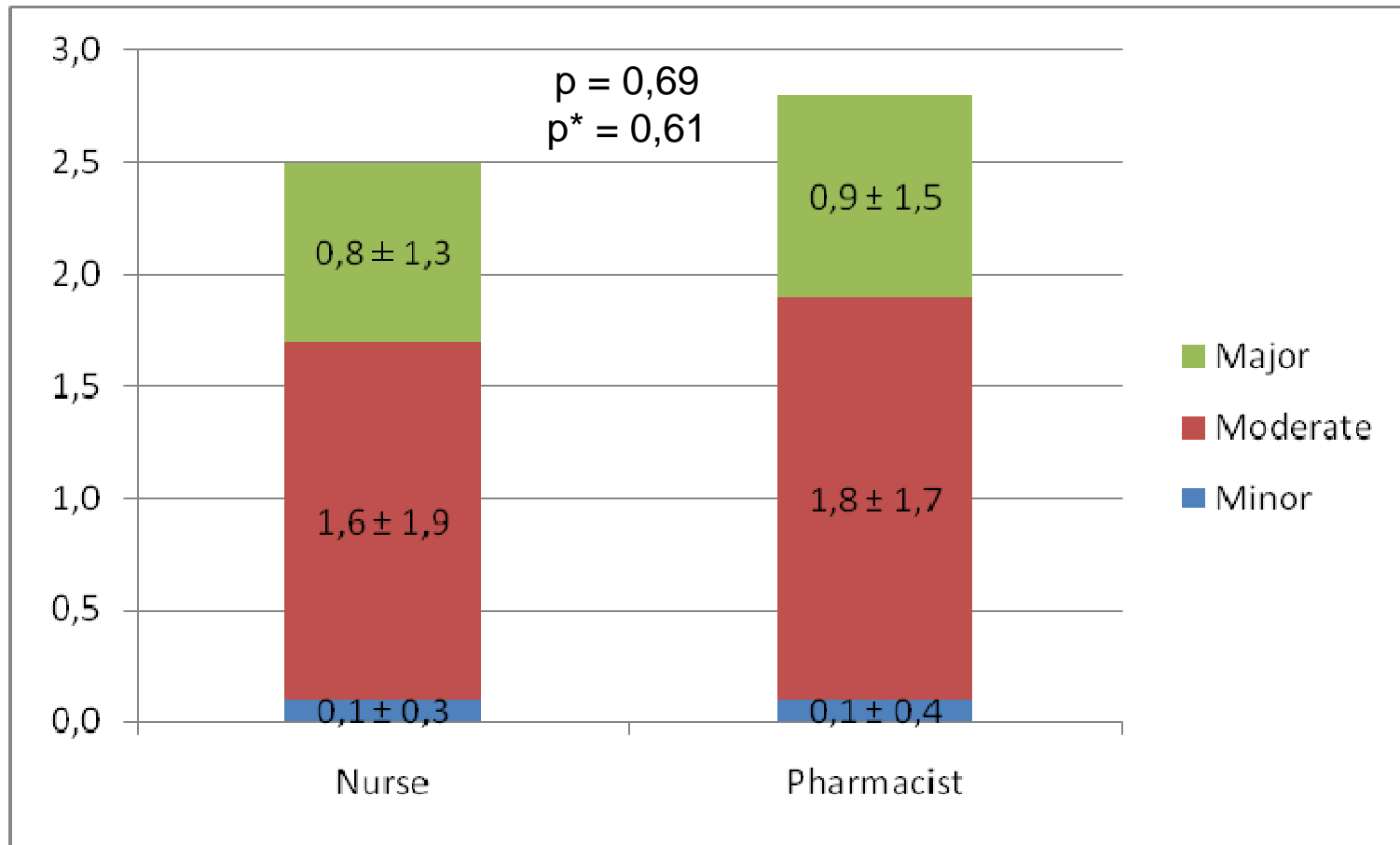
p* : p-value adjusted for sex and Katz

Potentially inappropriate drug/patient



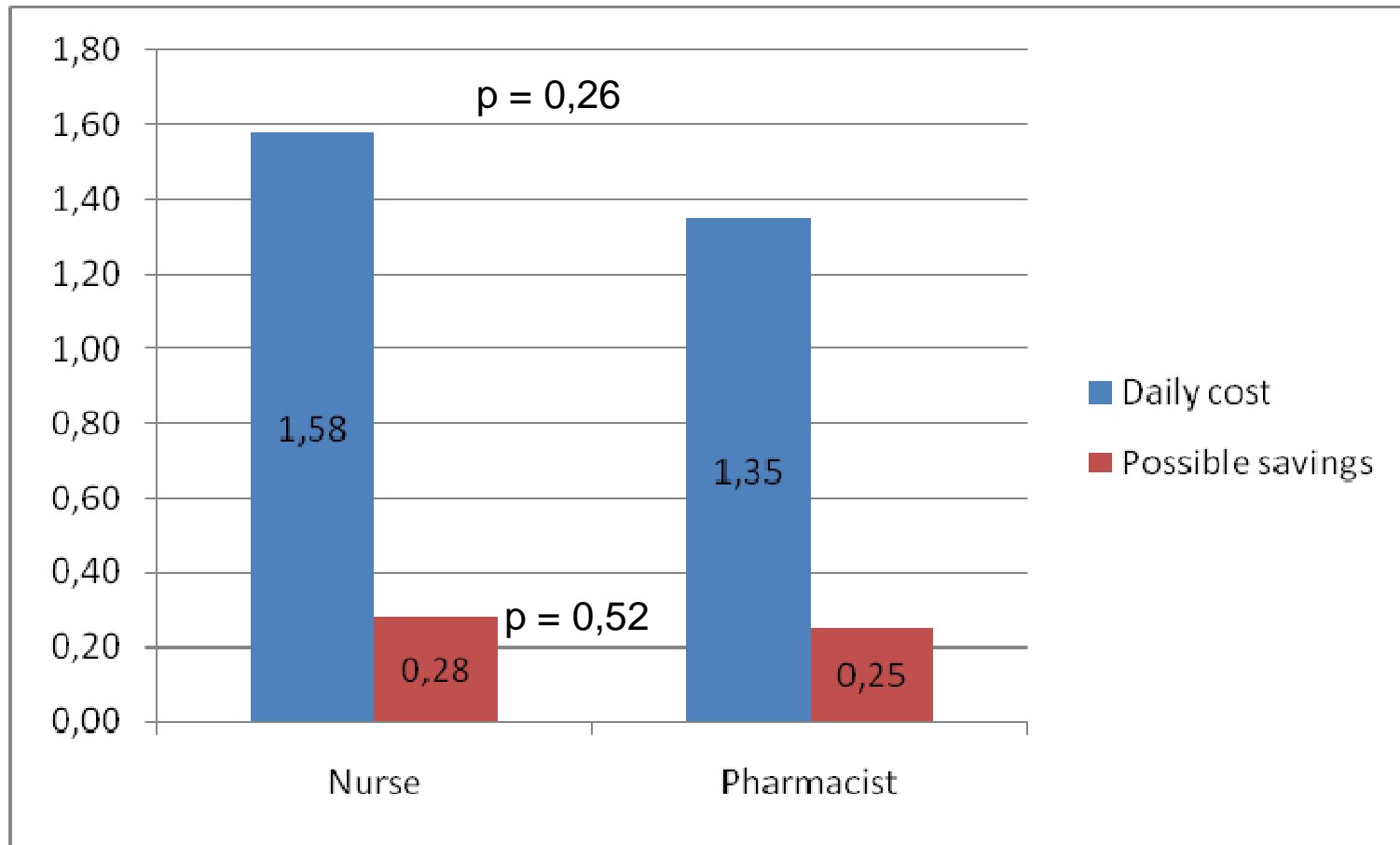
p* : p-value adjusted for sex and Katz

Number of interactions/patient (N=20)



p^* : p-value adjusted for sex and Katz

Daily cost for the patient (EUR)





DISCUSSION & CONCLUSION

- No significant difference between both drugs distribution systems according to
 - quantitative,
 - qualitative and
 - Economic point of vue
- But better communication between nursing and pharmacist
- Reduction of distribution and administration errors ?



The road is still long ...

Prospects of improvement

- Feedback of these results to the team
- Identify barriers to rational and appropriate use of medicines
 - Time ?
 - Formation of pharmacists ?
 - Communication with physicians ?
 - ...



Thank you for your attention ...