


An easily understandable patient letter improves patient health literacy after hospitalisation

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Background

- patient information after hospitalisation is insufficient in Germany [Vitt et al. 2005]
- limited health literacy is associated with:
 - poor health status and behaviour,
 - increased health care utilisation and associated costs [Jordan & Hoebel 2015]

Aim

Does an easily understandable patient information letter improve health literacy ?

→ Focus on understanding and evaluation of information

Methods

- **Pragmatic RCT** in Paracelsus Clinic Bad Ems, Clinic for Internal Medicine (2016-18): patient-letter (intervention group, IG) vs. patient information as usual (control group, CG)
- **Measurements:** postal patient survey 3 days after sending the patient letter (IG) or after discharge (CG)
- **Survey instruments:** health literacy (HLS-EU-Q47), health status-/behavior, medication intake, satisfaction with clinic and received information (Picker-survey „stationary care.“), need for written patient letter, evaluation of patient letter (IG)
- **Data analysis:** Chi²-test, Z-test, t-test, Spearman-Rho test, effect size: Cohen's d

Results

Response: 417 (23.5 %) of 1772

n_{IG}=242 and n_{CG}=175



- **54% report insufficient information** reg. medication at home after discharge
- 93% wish information after every hospital stay
- HL total index (HLS-EU47): **2/3 with inadequate/problematic HL** (IG vs. CG: n.s.)

Table 1 Sample description

Variables	total n (%)	IG n (%)	CG n (%)
Participants	417	241 (58 %)	176 (42 %)
Gender			
male	234 (56 %)	139 (58 %)	95 (54 %)
female	183 (44 %)	103 (43 %)	80 (46 %)
Age			
20 - 45 years	13 (3 %)	8 (3 %)	5 (3 %)
46 - 65 years	107 (26 %)	66 (27 %)	41 (23 %)
over 65 years	297 (71 %)	168 (70 %)	129 (73 %)
Level of education			
low	210 (50 %)	128 (53 %)	82 (47 %)
middle	80 (19 %)	43 (18 %)	37 (21 %)
high	62 (15 %)	32 (13 %)	30 (17 %)

Table 2 Significant differences regarding HLS-EU47 single items

On a scale from very easy (=4) to very difficult (=0), how easy would you say is to ...	Groups	Mean	SD	p (t-Test)	Cohens d
... find information about symptoms of illnesses that concern you?	IG	2.3	1.2	0.046	0.220 ↑
	CG	2.1	1.3		
... understand what your doctor says to you?	IG	2.8	1.1	0.035	0.223 ↑
	CG	2.5	1.2		
... understand the leaflets that come with your medicine?	IG	2.4	1.1	0.003	0.311 ↑
	CG	2.1	1.2		
... judge how information from your doctor applies to you?	IG	2.2	1.3	0.019	0.267 ↑
	CG	2.0	1.2		
... understand your doctor's or pharmacist's instruction on how to take a prescribed medicine?	IG	3.2	1.1	0.027	0.232 ↑
	CG	2.9	1.2		
... find out about activities that are good for your mental well-being?	IG	1.7	1.4	0.048	0.232 ↑
	CG	1.4	1.4		

Key messages

Our patient letter improves health literacy regarding several health literacy skills and enables to understand information on

- own disease/health condition
- disease-related therapy

→ Patient letter reduces uncertainties in dealing with illness and treatment

Literature

Vitt, K.D., Erben, C.M., Kupsch, S., Rüter, W. Patientenbrief. Mittel zur Sicherung des Heilerfolgs. *Dtsch Arztebl* 2005; 102:A 3002-3004.

Jordan, S., & Hoebel, J. (2015). Health literacy of adults in Germany: Findings from the German Health Update (GEDA) study. *Bundesgesundheitsblatt, Gesundheitsforschung, Gesundheitsschutz*, 58(9), 942-950.

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