

**P0863**

**Paper Poster Session**

**Vaccines in public health**

**Factors associated with influenza and pneumococcal vaccine uptake among Danish rheumatoid arthritis patients invited to participate in a pneumococcal vaccine trial (Immunovax\_RA)**

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**Background:** Rheumatoid Arthritis (RA) patients are at increased risk of suffering from respiratory infections compared to the general public. Vaccinations against *Streptococcus pneumoniae* and influenza should be strongly considered in RA patients receiving conventional or biological DMARD (Disease Modifying Anti-Rheumatic Drugs). This study aimed to estimate the prevalence and predictors of influenza and pneumococcal vaccine coverage among RA patients invited to participate in a trial of pneumococcal vaccination.

**Material/methods:** Overall, 228 RA patients from two rheumatologic clinics in the Region of Southern Denmark were informed about the survey, which was completed by a total of 192 (84%). The questionnaire included questions concerning previous influenza and pneumococcal vaccine uptake and attitudes about vaccination, civil status, household income and education level. Factors associated with vaccine uptake were assessed by multivariate logistic regression.

**Results:** Among the 192 RA patients who completed the survey: 70% were female, 47% aged 65+, 35% received cDMARD and 65% bDMARD. Self-reported uptake of vaccination against seasonal influenza ever was 57% overall, 61% among patients receiving cDMARD, 59% in patients receiving bDMARD, 50% in patients <65, and 70% in patients aged 65+ (Table 1). Self-reported vaccine uptake against pneumococcal diseases was only 6% overall. Older age, education level, and information and recommendation by specialist or general physician were positively associated with flu-vaccine uptake, while there was no significant difference in vaccine uptake according to type of RA treatment. The main reasons for not being vaccinated were fear of adverse effects, lack of information and recommendation, and perception of good health.

**Conclusions:** Despite national and international recommendations for influenza and pneumococcal vaccination, we observed a low prevalence of these vaccinations among RA patients receiving immunosuppressive drugs, in particular with low rates and limited awareness of the need for

pneumococcal vaccination. Efforts are needed to better inform patients and physicians regarding recommended immunizations.

Table 1.

<b>Flu vaccine coverage <u>ever</u> and factors associated with vaccination in multivariate analysis.</b>				
	Number	Flu vaccine uptake n(%)	Multivariate OR (95% CI)	p
Overall	192	114 (59)		
Age				
18-65	102	51 (50)	1	0,009
>65	90	63 (70)	2,42 (1,25-4,71)	
Sex				
Male	58	35 (60)	1	0,59
Female	134	79 (59)	0,82 (0,39-1,70)	
Treatment				
cDMARD	67	38 (57)	1	0,2
bDMARD	125	76 (61)	1,55 (0,79-3,07)	
Education				
< high school	131	74 (56)	1	0,03
> high school	56	38 (68)	2,30 (1,08-4,86)	
ND	5	2 (40)		
Source of information				
General physician	73	52 (71)	3,77 (2,49-18,40)	<0,001
Rheumatologist	48	32 (67)	4,98 (1,71-14,56)	<0,001
Other	42	21 (50)	2,11 (0,75-5,96)	0,16
None	29	9 (31)	1	