# The Nordic Occupational Skin Questionnaire (NOSQ-2002) in Norwegian

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#### Sir,

The Nordic Occupational Skin Questionnaire (NOSQ-2002) was designed in 2002 by a Nordic group of dermatologists for surveying work-related hand and forearm dermatitis (1, 2). The questionnaire has been available as an English master and has been translated into Danish, Finnish, Icelandic and Swedish. The questionnaire includes questions on occupational background, history of atopic symptoms, self-reported hand or forearm eczema and urticaria, occupational exposures and risk factors, skin testing, as well as consequences and life impact of dermatoses. The design of the questionnaire is thoroughly described elsewhere (1, 2). The set of questions can be chosen according to the study population, or a short ready-to-use questionnaire can be used for screening of hand and forearm dermatoses in workplaces with known risk of skin diseases. Our aim was to translate the questionnaire into Norwegian.

### Methods

The translation of the English master into Norwegian was done by the authors. It was then pre-tested in 11 patients referred to the Department of Dermatology, Ullevaal University Hospital with a suspected diagnosis of occupational hand eczema. The questionnaire was self-administered and was filled in before the appointment with the doctor. Some of the answers were discussed during the visit. All the patients were seen by one of the authors (AH-S). A few adjustments were made to the questionnaire based on these answers. The questionnaire was then translated back to English by a bilingual consultant in dermatology, who had not otherwise participated in the work. This English translation was compared with the English master by the authors, and in the matter of discrepancy, a correction in the Norwegian questionnaire was made. A new pre-test was performed with 10 new patients, this time not leading to any new changes in the questionnaire. Question G4 was validated further in a setting of 98 outpatients with different dermatological conditions seen by doctors at the Department of Dermatology, Ullevaal Hospital. The patients were 18-62-year-old and spoke fluent Norwegian. They filled in questions G4, 5 and 8 just before visiting the doctor, who then asked the same questions during the visit not knowing the patient's answers.

### Comments on the Questionnaire

*Question G4* asks about the present occupation. Three out of 21 patients struggled with this question in the questionnaire. These patients were disabled due to their hand eczema and were either in a rehabilitation program or received a 50-100% disability pension. They did not find their relevant category displayed in question G4 and answered as if they still were employed in their previous occupation. The other problem with question G4 was that only one answer was requested. This caused confusion for a part-time working student as well as for the patients mentioned above who were still working part time.

We analysed this problem further by studying questions G4, G5 and G8 in 98 outpatients with different dermatological conditions. In 11 cases, question G4 was left unanswered by the doctor leaving 87 patients available for analyses. Two patients did not answer question G4. One of them was on a rehabilitation program and the other one was partly working, partly on a disability pension. Eight of the patients ticked two boxes in G4 instead of one required. Five of them were students working parttime, ticking "employed" and "student". Three of the patients ticked "employed" and "self-employed" boxes, explaining that they were employed by their own company. Two of the patients ticked both the "retired" and the "other, what?" boxes. One of them was on a disability pen-



sion and the other one sick-listed for a long period. One patient ticked 3 boxes in G4: "employed", "retired" and "other, what?". She was working 50% on a medical rehabilitation program and had a 50% disability pension. Four patients, who had ticked G4 correctly, answered differently than their doctor. Three of them had ticked "retired", while the doctor had chosen the alternative "other, what?" describing that the patient was on a disability pension, rehabilitation program or sick-listed for a long period. One patient ticked "employed" while the doctor ticked "self-employed". Altogether, the answers between patients and doctors were found to correlate well. The Spearman's Correlation Coefficient was 0.95 for question G4, 0.95 for G5 and 0.87 for question G8.

In conclusion, question G4 may cause confusion for persons who are on disability pension or rehabilitation program or have been on sick leave for a long period of time. As well as for persons with two affiliations such as part time working students. In order to clarify the question we added "for example disability pension, rehabilitation" under the category "other, what?". Disability pension was also added as an alternative category to the *question C1* regarding occupational consequences of skin disease.

*Question A1* is a descriptive, symptom-related question on the history of atopic eczema validated by Williams et al. in 1994 (3). *Question S5* 

aims to identify the same group of patients as A1 using layman terms of childhood atopic eczema, which in Norwegian goes "Have you had childhood eczema (eksem)?" Among the 21 respondents here, the answeres correlated in 12 patients (57%). Two of the patients answered no to question A1 and yes to question S5, while four of the patients answered yes to question A1 and no to question S5. Three patients answered do not know to one of the questions.

*Question S3* about dry skin was misinterpreted by two of the patients who answered "I have dry skin", meaning dry skin merely on the hands, not generally. The question was modified in the Norwegian version as follows:"Is your skin generally dry"?

*Question U1* about urticaria caused problems for some of the patients in the first pre-test. In the formulation "Have you ever had itchy wheals (nettle rash)", the word nettle rash (elveblest) was not known by them and the word wheal (vable) was even less familiar. The question was rewritten into a more descriptive form: "Have you had nettle rash. Nettle rash means transient, red, itchy, small swellings of the skin".

*Question E5* investigates exposure to common irritants and chemicals. Two of the patients in the first pretest had ticked all non-relevant exposures in the category of less than 1/2 hour a day exposure, instead of

ticking only the applicable ones, as told. A "zero hour" category was added to the question similar to question E6. In the second pre-test 4 out of 10 patients did not use the 0 category when acquired but left the alternatives unanswered. Six patients used the 0 category correctly.

### Conclusion

The Nordic Occupational Skin Questionnaire has now been translated to Norwegian and will soon be available at http://www.ami.dk/ Spørgeskemaer/NOSQ-2002.aspx and http://www.stami.no.

#### Acknowledgement

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#### References

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## NOSQ-2002/SHORT in Norwegian - Nordisk spørreskjema om arbeidsrelaterte hudsykdommer

*Veiledningen til utfylling av spørreskjemaet er skrevet i kursiv.* 

Løpenummer:	
G1.	Arbeidsplass:Avdeling:
G2.	Er du mann 🗌 1 kvinne 🗌 2
G3.	Fødselsår: 19
G5.	Hva er ditt nåværende yrke? Fra hvilket år? ( <i>årstall</i> )
G6.	Hva er dine viktigste arbeidsoppgaver? Fra hvilket år? (årstall)
G7.	Hvor mange timer i uken arbeider du i din hovedjobb (i gjennomsnitt)? ( <i>timer/uke</i> )
G8.	Utfører du regelmessig noe annet betalt arbeid?
	nei 1 ja 2 Hva slags arbeid? Hvor mange timer i uken (i gjennomsnitt)? ( <i>timer/uke</i> )
D1.	Har du noen gang hatt håndeksem? nei $1$ ja $2$
D2.	Har du noen gang hatt eksem på håndledd eller underarmer (unntatt innsiden av albuene)?
	nei 🗍 (hvis du også svarte "nei" på spørsmål D1, gå til spørsmål S5)
	ja 2
D5.	Når hadde du sist eksem på hender, håndledd eller underarmer? <i>(ikke mer enn ett kryss i hver kolonne)</i>
	Håndeksem Eksem på håndledd/underarmer
	jeg har eksem nå
	ikke nå, men i løpet av de siste 3 måneder 4
	for 3-12 måneder siden 5 5
	for mer enn 12 måneder siden 6 Urillet år hadda dy dat sidt2(myar að præsiat dy legn) (årstall) (årstall)
F1.	Hvilket år hadde du det sist?( <i>svar så presist du kan)</i> ( <i>årstall</i> ) ( <i>årstall</i> ) Har du lagt merke til om kontakt med visse materialer, stoffer, kjemikalier eller annet i arbeidet ditt forverrer
11.	eksemet? (ikke mer enn ett kryss i hver kolonne)
	Håndeksem Eksem på håndledd/underarmer
	nei 1
	ja 2 2
	Hva?
	vet ikke 0 0
F2.	Har du lagt merke til om kontakt med visse materialer, stoffer, kjemikalier eller annet utenom arbeidet ditt
	forverrer eksemet? (ikke mer enn ett kryss i hver kolonne) Håndeksem Eksem på håndledd/underarmer
	nei 🗔 1 🗍 1
	ja 2 2
	Hva?
	vet ikke 0 0
F4.	Blir eksemet ditt bedre i perioder når du er borte fra ditt vanlige arbeid (f.eks. helger, ferier eller andre lengre
	fravær)? (ikke mer enn ett kryss i hver kolonne)
	nei Ti Ti
	nei I I ja, av og til 2 2
	ja, vanligvis 3 3
	vet ikke
S5.	Hadde du eksem som barn? (kalles også atopisk eksem)
	nei 🗌 1
	ja 2 Har en lege stilt diagnosen? nei 1 ja 2 når? ( <i>årstall</i> )
	vet ikke 🔲 0

51