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French validation of the FACE-Q Rhinoplasty module

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Email: thomas.radulesco@ap-hm.fr**Objectives:** The aim of this study was to translate the FACE-Q "Rhinoplasty" module into French and validate its use for the French-speaking population.**Design:** "Satisfaction with the nose" and "Satisfaction with nostrils" questionnaires were used and translated.**Settings:** We were granted permission to use the FACE-Q rhinoplasty module by the development team. These two questionnaires constitute the rhinoplasty module of the FACE-Q questionnaire. ISPOR and WHO recommendations were used to complete the translation process from English into French in six steps.**Main outcome measurement:** Our goal was to obtain, not a literal translation, but rather a translation of the idea or concept.**Results:** Each step allowed us to make changes to achieve a conceptual translation equivalent to the original version.**Conclusion:** The FACE-Q questionnaire is a reference in the field of cosmetic surgery outcome evaluation. The use of two validated translation recommendations, with a six-step translation-back translation process, leads to a French version corresponding to the original. This version is usable in a French-speaking population.

1 | INTRODUCTION

The evaluation of outcomes after rhinoplasty remains difficult.^{1,2} Most aesthetic and quality of life questionnaires designed to determine patient-reported outcomes after rhinoplasty are available only in English.³⁻⁶ Adaptation of questionnaires to other languages (an important proof of their validity and their international impact) makes it possible to ensure their conceptual equivalence with the original questionnaire.⁷⁻¹⁰ Few questionnaires concerning aesthetic or functional surgery of the nose are available in French.¹¹⁻¹³ To our knowledge, none is available in French regarding deformations of the nose. The FACE-Q self-questionnaire is a validated instrument measuring patient satisfaction and was created to assess the impact of cosmetic surgical procedures. FACE-Q has been rigorously developed, measuring both aesthetic satisfaction and the quality of life of patients.¹⁴ Klassen et al developed a specific module for rhinoplasty to assess the nasal pyramid and nasal wings.¹⁵ We have translated these questionnaires in accordance with international translation recommendations.^{16,17}

The purpose of this study was to translate and validate in French the "Rhinoplasty" module of the FACE-Q self-questionnaire and to validate its use for a French-speaking population.

2 | METHODS

2.1 | Ethical considerations

We obtained permission to use the FACE-Q self-questionnaire from the development team. All patients who participated in the development gave their consent before participating in this study, which was carried out in accordance with the Declaration of Helsinki.

2.2 | Methods

"Satisfaction with the nose" and "Satisfaction with nostrils" questionnaires were used and translated.¹⁵ The combination of these two questionnaires constitutes the FACE-Q rhinoplasty module. ISPOR (International Society for Pharmacoeconomics and Outcomes Research) and WHO (World Health Organization) recommendations were used to carry out the translation process.^{16,17}

The six-step procedure translation process (described in Table 1) was as follows:

Step 1: Two independent individuals translated the original questionnaires from English into French: a rhinoplasty specialist surgeon and

a translator, both were French mother tongue and spoke English fluently. By combining the two translations, we obtained *French version 1*.

Step 2: French version 1 was translated into English by a native English-speaking translator. This version was compared with the original FACE-Q and submitted to Prof. Klassen, the designer of the English questionnaire. Items containing discrepancies were retranslated. Each version was submitted to the developers until satisfied. We thus obtained *French version 2*.

Step 3: French version 2 was submitted to a panel of health care professionals to determine whether it was understandable and easy to use. Further corrections led to the production of *French version 3*.

Step 4: French version 3 was tested on 25 patients to determine whether instructions, filling method and items were understandable and unambiguous (18 women and 7 men). Patients were asked to complete the questionnaire in the presence of a practitioner who noted their reactions regarding the understandability of each item. Thanks to these remarks, we modified the questionnaire and obtained *French version 4*.

Step 5: French version 4 was completed by 25 patients during a specialised consultation (15 women, 10 men). Questionnaires were completed by the patient alone to avoid any external influence on him/her. Answers to this questionnaire were gathered and integrated, leading to *French version 5*.

Keypoints

- The evaluation of outcomes after rhinoplasty remains difficult and most esthetic and quality of life questionnaires are available only in English.
- The FACE-Q self-questionnaire is a validated instrument measuring patient satisfaction and was created to assess the impact of cosmetic surgical procedures.
- We translated "Satisfaction with the nose" and "Satisfaction with nostrils" questionnaires: the combination of these two questionnaires constitute the FACE-Q Rhinoplasty module.
- Adaptation of questionnaires to other makes it possible to ensure their conceptual equivalence with the original questionnaire.
- The FACE-Q questionnaire is a reference in the field of patient-reported outcomes after esthetic surgery. Our version is usable in a French-speaking population.

Step 6: French version 5 was read by a panel of surgeons and validated, with minor modifications, to obtain the *Final version*.

TABLE 1 ISPOR, WHO and translation process recommendations used in our study

ISPOR	WHO	Our study
1 Preparation: Before the translation process begins, permission is obtained, developers are invited to participate, explanations are found for concepts in the instrument, and key persons are recruited.		Permission was obtained from the Klassen team. The translators and the expert panel were recruited.
2 Forward translation	Forward translation	Translation: by a translator, preferably a professional. The latter must be fluent in English but have a French mother tongue. Translation must be more conceptual than literal.
3 Reconciliation: reconciliation of the forward translations into a single forward translation.		These two versions were merged leading to French version 1.
4 Back translation into English	Back translation into English	A native English-speaking professional translator fluent in French retranslated the questionnaire.
5 Back translation review		Comparison with the original FACE-Q version of the previously obtained English version. Discussion with Prof. Klassen on the differences, repeated process to satisfaction. We obtained French version 2.
6 Harmonisation with a panel expert	Harmonisation with a panel expert	The expert panel met the translators, specialists in rhinoplasty, to validate the French version 3 before testing it on patients.
7 Cognitive debriefing	Pre-test and cognitive interviews	In-depth interview of 14 patients to obtain French version 4.
8 Review of cognitive debriefing results and finalisation		Harmonisation of the questionnaire to obtain French version 5.
9 Proofreading	Final version	Finalisation and proofreading leading to the final French version.
10 Final report	Documentation: (All steps must be traceable)	Final report of the translation process. The final report includes all the steps in the translation.

2.3 | Reproducibility

To test the reproducibility of this new scale, a test-retest assessment was performed. The patient filled the questionnaire again 4 days later. It was evaluated using Pearson's correlation coefficient. Higher the coefficient is, higher is the reproducibility. This test was performed for each questionnaire.

3 | RESULTS

Thanks to this validated procedure, we were able to obtain an equivalent French version to the English version.

Regarding Step 1, we chose to have two independent translations performed by people from different professional backgrounds with a view to establishing an exchange between these different parties and obtaining a consensus. Some terms chosen by the practitioner appeared to be too technical in the eyes of the translator: for example "bridge of the nose" was translated as "dorsum nasal" by the practitioner and as "arête du nez" by the translator, which is easier to understand for the general population. Conversely, "nostrils show" was difficult to translate for a non-rhinoplasty surgeon.

The two translations were selectively merged to obtain *French version 1*. In the English translation of *French version 1*, we identified translation differences mainly in items referring to the nostrils. This modified version was submitted, in French and English, to Professor Klassen's team for harmonisation. The modifications made by Professor Klassen's team mainly concerned the item ratings, which were modified, giving *French version 2*. This version was then tested on several rhinoplasty surgeons. Regarding step 4, the population was composed of 25 patients (15 women (mean age = 36) and 10 men (mean age = 33)). There were 22 primary rhinoplasties and 3 secondary rhinoplasties. We made major changes to the instructions, to reflect the original version more faithfully. The initial translation of "very dissatisfied" was "très mécontent," which was now changed to "très insatisfait." The last 2 versions received only minor and essentially grammatical revisions. In order to conform more closely to the original instructions, the wording of some items was modified. The nose deviation item was reworked during this step: "How straight your nose looks?" was translated by "La déviation de votre nez?" whereas it was originally translated as "Votre nez, est-il droit?" which complied more fully with the quotation instructions.

Patient feedback was encouraging, as responders found the questionnaire relevant, and easy to understand and use.

3.1 | Reproducibility

For both questionnaires, the two results were strongly and significantly correlated.

For FACE-Q Satisfaction with Nose, Pearson's $r = 0.981$ ($P < 0.05$).

For FACE-Q Satisfaction with Nostrils, Pearson's $r = 0.976$ ($P < 0.01$).

4 | DISCUSSION

4.1 | Comparison with other studies

Other teams have already used the same methodology.^{18,19} Some authors highlighted major cultural differences within populations that were generally supposed to be comparable.²⁰ Thus, the translation-back translation process we used is essential to obtain a faithful rendering of the original document.²¹ Our goal was to obtain, not a literal translation, but rather a translation of the idea or concept.²²

4.2 | Strength of the study

ISPOR and WHO recommendations were chosen for the translation process, which made it possible to obtain a French culturally adapted version of the FACE-Q "Rhinoplasty" module equivalent to the English.^{16,17} There are some differences between the two translation methods (ISPOR and WHO), each of which has advantages and disadvantages. For example, ISPOR recommendations stipulate that two translators should perform an English-French translation independently, followed by a coordination meeting, while the WHO recommendations emphasise the importance of a more conceptual as opposed to a literal translation using the translation-back translation process.

4.3 | Clinical applicability of the study

As recommended by the WHO guidelines, it is advisable to assemble a panel of experts to test the questionnaire. This step was very important in the translation of the questionnaires and led to many changes. It was indeed essential to include rhinoplasty surgeons but also other medical professionals since the points of view of rhinoplasty surgeons are sometimes biased, especially regarding the understandability of technical terms for the general population. We also wanted to include patients themselves in the translation process, by gathering their opinion on each item, since the questionnaire is ultimately intended for them. Their remarks also gave rise to important changes. The patients interviewed were similar to target patients because seen in consultation or during hospitalisation for rhinoplasty.

The analysis of reproducibility attests of the efficiency of this questionnaire although it has been translated into French language. It proves that the translation-back translation process does not affect its validity.

The combined use of both methodologies aimed to minimise bias in the translation process. No translation is perfect; conceptual differences may always remain. When translated back into English, it was considered that these differences were minimal and did not lead to a change in the meaning and understanding of the questionnaire.

5 | CONCLUSION

The FACE-Q questionnaire is a reference in the field of patient-reported outcomes after aesthetic surgery. The combined use of two

validated recommendations, with a six-step translation-retranslation process, made it possible to obtain a good quality French version that was in line with the original version. This version is usable in a French-speaking population of patients requiring evaluation before or after rhinoplasty.

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CONFLICT OF INTEREST

None.

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REFERENCES

- Naraghi M, Atari M. Interest in aesthetic rhinoplasty scale. *Facial Plast Surg*. 2017;33(02):217-224.
- Pusic A, Klassen A, Panchapakesan V, Cano S. Response to "The FACE-Q: The importance of full disclosure and sound methodology in outcomes studies". *Aesthetic Surg J*. 2014;34(4):628-631.
- Radulesco T, Penicaud M, Santini L, Thomassin JM, Dessi P, Michel J. The MiRa scale, a new standardized scale for evaluating nasal deformities before and after septorhinoplasty: a prospective study comparing patient satisfaction and the surgeon's assessment. *Clin Otolaryngol*. 2017.
- Moubayed SP, Ioannidis JP, Saltychev M, Most SP. The 10-item standardized cosmesis and health nasal outcomes survey (SCHNOS) for functional and cosmetic rhinoplasty. *JAMA Facial Plast Surg*. 2018;20(1):37-42.
- Barone M, Cogliandro A, Di Stefano N, Tambone V, Persichetti P. A systematic review of patient-reported outcome measures after rhinoplasty. *Eur Arch Otorhinolaryngol*. 2017;274(4):1807-1811.
- Naraghi M, Atari M. Development and validation of the expectations of aesthetic rhinoplasty scale. *Archives of plastic surgery*. 2016;43(4):365.
- The Whoqol Group. The World Health Organization Quality of Life Assessment (WHO- QOL): development and general psychometric properties. *Soc Sci Med*. 1998;46:1569-1585.
- Guillemin F, Bombardier C, Beaton D. Cross-cultural adaptation of health-related quality of life measures: literature review and proposed guidelines. *J Clin Epidemiol*. 1993;46:1417-1432.
- Weinberger M, Oddone EZ, Samsa GP, Landsman PB. Are health-related quality-of-life measures affected by the mode of administration? *J Clin Epidemiol*. 1996;49:135-140.
- Beaton DE, Bombardier C, Guillemin F, Ferraz MB. Guidelines for the process of cross-cultural adaptation of self-report measures. *Spine*. 2000;25:3186-3191.
- Lepège A, Ecosse E, Verdier A, Perneger TV. The French SF-36 Health Survey: translation, cultural adaptation and preliminary psychometric evaluation. *J Clin Epidemiol*. 1998;51:1013-1023.
- Mortuaire G, Vandeville S, Chevalier D. Psychometric evaluation of the SinoNasal Outcome Test-16 for quality of life in chronic rhinosinusitis with nasal polyps. *Eur Ann Otorhinolar- yngol Head Neck Dis*. 2010;127:91-96.
- Marro M, Mondina M, Stoll D, de Gabory L. French validation of the NOSE and RhinoQOL questionnaires in the management of nasal obstruction. *Otolaryngol Head Neck Surg*. 2011;144:988-993.
- Klassen AF, Cano SJ, Scott A, Snell L, Pusic AL. Measuring patient-reported outcomes in facial aesthetic patients: development of the FACE-Q. *Facial Plast Surg*. 2010;26:303-309.
- Klassen AF, Cano SJ, East CA, et al. Development and psychometric evaluation of the FACE-Q scales for patients undergoing rhinoplasty. *JAMA Facial Plast Surg*. 2016;18:27-35.
- Wild D, Grove A, Martin M, et al. Principles of good practice for the translation and cultural adaptation process for patient-reported outcomes (PRO) measures: report of the ISPOR task force for translation and cultural adaptation. *Value Health*. 2005;8:94-104.
- WHO (World Health Organization). Process of translation and adaptation of instruments. http://www.who.int/substance_abuse/research_tools/translation/en/. Accessed February 12, 2016.
- Mokkink LB, Terwee CB, Patrick DL, et al. The COSMIN study reached international consensus on taxonomy, terminology, and definitions of measurement properties for health-related patient-reported outcomes. *J Clin Epidemiol*. 2010;63:737-745.
- Poulsen L, Rose M, Klassen A, Roessler KK, Sørensen JA. Danish translation and linguistic validation of the BODY-Q: a description of the process. *Eur J Plast Surg*. 2017;40:29-38.
- Naito K, Komori M, Mishima Y, et al. An international comparison of characteristics of the sensation of nasal obstruction between Canadian and Japanese patients. *Rhinology*. 1996;34(2):97-100.
- Lacasse Y, Series F. Health-related quality of life measurement: a readers' guide. *Rev Mal Respir*. 2004;21(4, pt 2):S63-S70.
- Klassen AF, Cano SJ, Scott A, Johnson J, Pusic L. Satisfaction and quality-of-life issues in body-contouring surgery patients: A qualitative study. *Obes Surg*. 2012;22:1527-1534.

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