

Supplementary Table 2: Instrument translation procedure

Descriptive summary of the process-based questionnaire translation procedure from English to Arabic language.

2. Description of instrument translation procedure

Originals of all instruments (Demographics, IPAQ-SF, BREQ-3) were initially available in English language. Translation procedure was guided by the development guidelines and adoption criteria of Health Survey Instruments of the European Commission. [20] Accordingly, all English instrument versions were first translated into Arabic language by a qualified translator, followed by an independent review of the preliminary translated Arabic version of the questionnaires including adaptations and correction efforts where necessary by an independent professional. Thereafter followed the independent back-translation of the Arabic version into English language of all instruments by a qualified professional and the direct correction of the translated version by another independent English-native professional. Finally, a final bilingual version of all instruments was created by the PI, re-checked and signed off by a bilingual specialist in the field before pilot testing.

Process table of data collection instrument translation procedure

Step	Input	Technique/ Activity	Executing institution/ responsible professional	Output	Start (month, year)	End (month, year)
1	Original English version of all instruments*	Forward translation from English to Arabic	Acting Assistant Professor of Public Health, College of Health Sciences, University of Qatar (Qatar)	Preliminary Arabic and bilingual** version of all instruments	March, 2018	April, 2018
2	Preliminary English version of all instruments	Review and correction/adaptation of preliminary instrument versions	Director of Nursing, authorized representative for english-arabic translations, Prince Mohammed bin Abdulaziz Hospital Riyadh (Saudi Arabia)	Final version of forward translation of English Originals to Arabic language, uni- and bilingual	June, 2018	Dec, 2018
3	Arabic Version of all instruments	Backward translation from Arabic to English	Qualified independent bilingual professional (United Arab Emirates)	Preliminary backtranslated English version of all instruments	Dec, 2018	Jan, 2019
4	Backtranslated English version of all instruments	Review and correction of the backtranslated English versions of all instruments	Professional English language educator (native speaker), governmental educational institution of the United Arab Emirates (United Arab Emirates)	Final backtranslated English version of all instruments	Jan, 2019	Feb, 2019
5	Final versions of forward & backward translations of all instruments	Creation of a bilingual version of all instruments on basis of forward & backward translations	Principal Investigator, International Iberoamerican University (Mexico)	Preliminary bilingual version of all instruments on basis of forward & backward translations	Feb, 2019	Feb, 2019
6	Preliminary bilingual version of all instruments on basis of forward & backward translations	Final corrections and adaptations of bilingual instrument	Director of Nursing, authorized representative for english-arabic translations, Prince Mohammed bin Abdulaziz Hospital Riyadh (Saudi Arabia)	Final bilingual version of all instruments ready for pilot testing	Feb, 2019	March, 2019

* IPAQ-SF, BREQ-3, demographic & anthropometric questions

** Bilingual = Arabic & English