Brazilian-Portuguese Version of My Strengths My Health System: A Methodological Study

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Abstract. My Strengths My Health (MSMH) is a simplified version of the Omaha System developed for the use of patients and their caregivers. Its main objective is to enable a whole-person assessment with the participation of the patients in understanding the concepts that comprise their care plan. Since 2021, we joined a worldwide initiative to translate MSMH to other languages and this paper reports the Brazilian experience in 3 stages, developed from January 2022 to December 2023: translation and back translation of terms, its validation by freshman nursing students and its adoption by patients at an outpatient facility. Among the results, we highlight the patients' comments on the perceived ease of use of the system. MSMH adoption by caregivers and populations of different cultures and languages can amplify the comprehension of biological, psychological, social, spiritual and environmental determinants of health worldwide specially if issues on digital health literacy are considered.

Keywords. Nursing informatics, whole person assessment, population health.

1. Introduction

MSMH is a health assessment system, which incorporates the Omaha System, encompassing whole-person health assessment, including social determinants of health and well-being, but designed for the patient who will self-report his health condition, answering objective questions. It was designed to be used with people of different educational levels, so it has a simple and accessible language. To carry out a complete whole-person assessment, MSMH addresses biological, psychological, social, spiritual and environmental elements. Therefore, the social and behavioral determinants of health were operationalized into domains: My Living; My Mind & Networks; My Body and My Self-Care.(1)

This paper reports the experience of translating MSMH to Brazilian Portuguese, as a part of a broad project that include other languages from countries worldwide.

2.   Methods

A methodological study was developed from January 2022 to December 2023, after the approval of the IRB, with three stages: 1. translation and backtranslation of the MSMH terms by independent translators; 2. validation of the terms by freshmen nursing students; and 3. assessment of MSMH adoption by a group of patients from an outpatient setting.

Stage 1 was conducted online, first with two translators that were health care professionals with expertise in English and whose mother language was Brazilian Portuguese. Translations (ENG to BR-PORT) were organized in spreadsheets and then, the backtranslation process (BR-PORT to ENG) was conducted, with two translators with the same background as the previous group. The final list with the terms in Portuguese and its correspondence in English was submitted to the MSMH researchers for final validation.

Stage 2 was conducted with 4 undergraduate students from the Federal University of Parana School of Nursing. We presented the MSMH website in Brazilian Portuguese to them, and we asked them to fill its forms and tell us which terms they didn't understand. The participant's answers were registered in spreadsheets and sent for the system update.

The validation of the Brazilian Portuguese version of the MSMH was conducted with 10 adult patients at an outpatient setting at the University Hospital – Stage 3. The Brazilian Portuguese version of the MSMH website was presented to them and after that, they filled a research instrument based on the Technology Acceptance Model, (TAM)(2) with the items: Perceived Ease of Use; Perceived Usefulness; Attitude to Use; Behavioral Intention; and Real Use, disposed in a 5-item Likert scale.

3.   Results

In Stage 1, 466 terms were translated, backtranslated and validated by the MSMH researchers.

In Stage 2, nursing undergraduate students gave specific contributions to the Brazilian Portuguese translation of the terms, specifically in the dimensions: My Life (cleanliness, house and safety); My Mind & Networks (connections, relationships, emotions, caring); My Body (moving).

Regarding the application of the TAM in Stage 3, among the 23 patients approached, 10 agreed to participate in the research, 90% were female and 10% male, of the age group between 60 and 69 years old (50%). All TAM dimensions were evaluated as 4-5, except in the 'Perceived ease of use' one, which participants graded lower (Figure 1).

Nevertheless, participants comments while filling the forms included: "Tiring" (P1); "For a younger audience" (P2); "For more literate people" (P3); "Use with the help of a professional"(P4); "It would take time to learn how to use it" (P5); "With help, it would be very good for her. Good for young people" (P6); "If it were printed it would be easier" (P7); "The connections part was difficult to understand" (P8).

Dimensão	Criteria	1	2	3	4	5
Perceived Ease of Use (PEU)	PEU_1 Learning to use MSMH Brazil would be easy for me.	1	1	1	4	3
	PEU_2 The way of interacting with the MSMH Brazil system is clear and easily understood	1	2	1	4	2
	PEU_3 It would be easy to become more skilled at using MSMH Brazil.	0	2	0	8	0
	PEU_4 I consider the MSMH Brazil system easy to use.	0	1	2	5	2
Perceived Usefulness (PU)	UP_1 Using MSMH Brazil, the quality of my healthcare may increase.	0	0	6	1	3
	UP_2 Using MSMH Brazil makes my healthcare more objective.	0	1	1	6	2
	UP_3 My consultation becomes more comprehensive using MSMH Brazil.	0	1	1	7	1
	UP_4 MSMH Brazil is useful for my consultation.	0	0	1	8	1
Attitude Toward Use (AU)	ATU_1 Using MSMH Brazil is a great idea for healthcare systems.	0	0	1	6	3
	ATU_2 I like the idea of using MSMH Brazil in my consultations	0	0	1	7	2
Behavioral Intention	BI_1 I intend to use MSMH Brazil whenever it is available.	0	1	1	7	1
	BI_2 I would recommend the use of MSMH Brazil.	0	0	1	7	2
Actual Use (AU)	AU_1 Have you ever used any system for a complete health evaluation?	Yes 0		No 10		

Figure 1. Participant's answers for the 'Perceived ease of use' dimension of TAM. Curitiba–PR–BR, 2023

4.   Discussion

Participants understand the MSMH importance, agree with its objectives and would recommend its adoption, but have difficulties in one of the main acceptance factors of a technology: the perceived utility - which " refers to the degree to which a person believes that using a particular system would enhance his/her job performance" (2).

When we relate this finding with the participant's comments, we may infer that participants may present a lack of digital health literacy, considering that in Stage 3, participants are represented by elderly people. Digital health literacy represents the ability of individuals to use digital media to search for health information, to interpret and qualify it in each situation and then adopt knowledge to treat or solve a health problem (3).

5.   Conclusions

MSMH is a system developed to fill the gap of understanding by patients when using information systems that are usually developed with complex technical terminologies. Also, MSMH adoption by caregivers and populations of different cultures and languages can amplify the comprehension of biological, psychological, social, spiritual and environmental determinants of health worldwide specially if issues on digital health literacy are considered

We were concerned to translate the terms and validate them with lay and young public participants to make its comprehension by broader populations easier. In fact, current processes of digital transformation must consider other generational-related issues that might interfere with their adoption of informatics-embedded technologies. So, the lack of diversification and sample size of participants stand out as limitations of this study. An expanded sample could allow a better assessment of the acceptance of the Brazilian version of the MSMH.

Acknowledgements

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