Implications of research findings for the future of health translation

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Machine translation – some terms

Automation (vertical, with downward arrow)

Traditional human translation (HT)

Computer Assisted Translation (CAT)

- Machine-aided human translation (MAHT)
- Human-aided machine translation (HAMT)

Fully automatic translation (FAMT)

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Translation Memory (TM)

- – Widely used by human translators (Lagoudaki, 2006)
- – Consists of a database of translated 'segments'
- – Matches from the database proposed as the translator translates
- – Usually used in conjunction with CAT tools and integrated translation systems (ITS)
- – Considered to improve consistency in a long document and across members of a translation team
- – Quality of the TM variable depending on the quality of the data entered (Moorkens, 2012; Moorkens et al., 2013)
- – Useful for highly repetitive texts and for re-translations of updated documents

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What can we expect from FAMT?

- Acceptable where
    - the ST is in a naturally occurring sub-language which has restricted lexis and structures
    - or is pre-edited to restrict the range of lexis and structures
    - rough translation is adequate

Post-editing

- Light post-editing: minimal intervention to achieve text comprehension (grammar and lexis)

- Full post-editing: depends on the brief but usually aimed at achieving text comprehension and stylistic improvements

- CAT tool + post-edit leads to up to 20% faster translation than HT 'from scratch' (Läubli et al., 2013)

Some challenges in health translation

- Multilingualism (>3 languages) = 'extreme case' for MT (Hutchins & Somers,1992)

- Varieties of language vs standard form

- Language distance for many of the languages

- Idiomatic usage in ST

- Variations in registers related to end users and language (Nisbeth Jensen, 2013)

- Health-related communication is culturally-embedded and therefore context dependent (e.g. Sarangi & Roberts, 1999)

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Health promotion fact sheets – what challenges for translation?

- Use of Latin-based terms
- Imperatives
- Specialised terminology
- Register variations
- Idiomatic language
- Homonyms

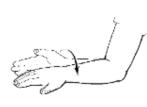# Anterior Shoulder Dislocation

Elbow flexion and extension

Take your arm out of the sling and let your arm hang by your side.

Gently bend and straighten your elbow.

Repeat 10 times, 3 times a day.

Rotation of forearm

With your upper arm resting by your side and your elbow bent, turn your palm over to face the floor and gently turn back until it faces the ceiling.

Repeat 10 times, 3 times a day.
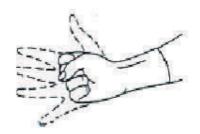
Wrist Flexion and extension

Whilst your arm is in the sling gently move your wrist up and down.

Do 10 times every hour while awake.

Hand exercises

Gently open you fingers so that your hand is flat then close it to make a fist.

Do 10 times every hour while awake.

Research on health translation – the relevance of the Turner et al. (2014) study to MHCS

- Findings of the study in relation to time, cost and quality potentially promising for health translation using MT + post-editing

- Results applicable to English/Spanish pair

- Relates specifically to the translation of health promotion material relevant to MCHS

Questions remaining

- HT profile and process
  - Educational background
  - Experience in health translation
  - Use of CAT tools?

- Costs & time calculated on the range of target languages not just the Spanish/English pair

- Language pair is likely to be a major variable in time, cost & quality

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Conclusions

- Range of options exist to improve the efficiency of health translation

- Feasibility of any of these options should be evaluated through a program of targetted research

- Translator profile and processes need to be taken into account

- The large number of highly variable language pairs will continue to pose a problem to efficiency

- End user testing important to assess readability

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