Say it in Croatian – Croatian Translation of the EGPRN Definition of Multimorbidity using a Delphi Consensus Technique

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ABSTRACT

Patients coming to their family physician (FP) usually have more than one condition or problem. Multimorbidity as well as dealing with it, is challenging for FPs even as a mere concept. The World Health Organization (WHO) has simply defined multimorbidity as two or more chronic conditions existing in one patient. However, this definition seems inadequate for a holistic approach to patient care within Family Medicine. Using systematic literature review the European General Practitioners Research Network (EGPRN) developed a comprehensive definition of multimorbidity. For practical and wider use, this definition had to be translated into other languages, including Croatian. Here presented is the Croatian translation of this comprehensive definition using a Delphi consensus procedure for Forward/Backward translation. 23 expert FPs fluent in English were asked to rank the translation from 1 (absolutely disagreeable) to 9 (fully agreeable) and to explain each score under 7. It was previously defined that consensus would be reached when 70% of the scores are above 6. Finally, a backward translation from Croatian into English was undertaken and approved by the authors of the English definition. Consensus was reached after the first Delphi round with 100% of the scores above 6; therefore the Croatian translation was immediately accepted. The authors of the English definition accepted the backward translation. A comprehensive definition of multimorbidity is now available in English and Croatian, as well as other European languages which will surely make further implications for clinicians, researchers or policy makers.

Key words: family medicine, multimorbidity, definition, Delphi procedure, Croatia

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disease with at least one other disease (acute or chronic) or
bio-psychosocial factor (associated or not) or somatic risk
Multimorbidity may modify the health outcomes and lead to
an increased disability or a decreased quality of life or frailty.

Introduction
Multimorbidity as a term is nowadays widely used; however, it still represents a challenging concept in medi-
cine and for Family Practice particularly. This concept
was first published in 19761 in Germany and remained
almost entirely restricted to German publications for
more than a decade. From the 90-ies onwards the term
was used more frequently and the concept became intern-
ationally recognized through research1.

At first, the concept of multimorbidity was regarded
as an addition to the concept of comorbidity. While co-
morbidity was defined as any disease or risk factors that
could interact with one main disease with the effect of
making it worse3–5, the definition of multimorbidity, by
the World Health Organisation (WHO) stated: people be-
ing affected by two or more chronic health conditions6.
This definition should surely be seen through the prism
of the WHO intention to look at all conditions in one in-
dividual that could impact on that individual’s global
health status. However the word ‘condition’ was not suf-
ciently clear for practical purposes (for instance, wheth-
er a treated disease was a ‘condition’ in this sense),
and could lead to numerous interpretations7.

Nevertheless, multimorbidity is a particularly inter-
esting concept for Family Practice, given the high and
ever increasing prevalence of chronic illness in the aging
population. Also, it is closely related to a comprehensive
view of the patient, which is a core competency of Family
Practice, as defined for instance by the World Organiza-
tion of National Colleges, Academies and Academic Asso-
ciations of General Practitioners/Family Physicians
(WONCA)8. Multimorbidity, in addition, is an engaging
concept, when applied to patients in practice, as it gives
an overview of all those factors that could lead to frail-
ty8–10. Frailty, however, is another new concept whose
translation is discussed further on.

Since the available, WHO definition of multimorbi-
dity was inadequate for practical use because of its inaccu-
acy and because of existence of its various definitions
in literature, thus a new, clear and more comprehensive
definition has been enhanced by an EGPRN workgroup.
The main aim of the whole project was to achieve a more
usable definition of multimorbidity in order to advance
research in this field throughout Europe. This kind of
definition would greatly help researchers in Family Prac-
tice to investigate the complexity of patients’ conditions
and their overall impact on patients’ health. Also, it
could be an additional tool for Family Physicians (FPs)
which would enable them to identify frail patients and
work on the prevention of their decompensation7.

For the purpose of clarifying the concept of multi-
morbidity for Family Practice and constructing a new
definition a research team, including 8 national groups
throughout Europe, all active within the EGPRN, was
created11. An initial review, presented in an EGPRN
meeting in spring 201112, identified more than one hun-
dred different definitions of multimorbidity used by aca-
demic researchers. They were all analyzed and used for
the construction of a new comprehensive definition of
multimorbidity13 (see Table 3). In October 2011 during
the EGPRN meeting in Krakow (Poland) researchers
from Croatia (University of Zagreb) joined the team to
further work on this definition. Hence, it was regarded
that the use of the concept of multimorbidity regarded by
FPs differs from those of other specialists and that added
value from their point of view surely exists and should be
looked for. Therefore, the first version of the definition
had to be translated into other European languages for
use in further collaborative qualitative research planned
to be performed using semi structured interviews and fo-
cus groups. The aim of this article was to evaluate the
Croatian version of this definition.

Methods
The forward and backward translation of the original
English definition has been undertaken using a Delphi
consensus procedure14. First, a team including 2 FPs and
one official translator translated the proposed extensive
multimorbidity definition into Croatian language (Table
1). According to the Delphi consensus procedure, the lo-
cal research team proposed to 23 GPs the English definition and its translation into Croatian language. Table 2 shows the characteristics of the expert panel. This proposition was done using emails (each participant has been contacted separately to avoid contamination). Participants were kindly asked to rank translation from 1 (absolutely not agreeable) to 9 (fully agreeable) and to explain each rank under 7. Consensus was reached when at least 70% of the participants rate the consensual definition as 7 or above. All suggestions and remarks made by the experts were collected for the purpose of enhancing the non consensual criteria, reformulate it and propose a new version for another Delphi round. If consensus was quickly achieved all suggestions and remarks had to be collected in order to enhance discussion. Once the consensual definition in Croatian had been established, two other official translators did a backward translation from Croatian into English and sent it for approval to the study’s scientific committee.

Results and Discussion

This study is a part of the EGPRN project, which aims to provide a comprehensive definition of multimorbidity throughout Europe. As can be seen in the Table 3 consensus was obtained already after the first round which means that it represents the 100% of the Delphi process. The only challenging term was frailty, which will be further discussed later on. Subsequently a backward translation was carried out. This backward translation, showed in the Table 4, was presented to the study’s scientific committee. The committee validated the translation obtained and found no semantic changes compared to the original English definition.

The main finding of this research is in line with the research aim that was to obtain the Croatian definition of multimorbidity and its backward English translation which was positively validated.

The Delphi technique used for translation is regarded as an accurate consensus technique in health research with its main strengths to eliminate information and selection bias. All research participants’ characteristics were very carefully assessed to ensure that each participant was a medical expert in Family Medicine, as well as being fluent in English. We regarded as our main weakness the fairly high grade that the participants ranked already the first version of translation and very few given comments. This could mean that the translation was ac-
curate and understandable or the participants were igno-
rant of the research aim and their task. However their
comments were only regarding the term »frailty« which
also disturbed the translators because of the difficulty of
translating this term in the spirit of Croatian language
and not finding an adequate Croatian synonym. Ori-
genally, this English term and concept in general has
been formulated to help physicians identify decompen-
sating patients especially in Long Term Care which is
FP’s every day’s bread16.

In relation to other studies on this topic performed
throughout the research network, i.e. translation to other
languages, there were no methodological differences.

As it is stated in other studies, a more comprehensive
definition leads to a better focused research, especially
regarding quality of care and cost of care13. This compre-
hensive definition is helpful for targeting resources in a
far more accurate way than the WHO definition8. In ad-
dition, it gives more focused individual prognoses and
improves risk management as well as clinical decision
making in terms of risk/benefit evaluation17.

Regarding all previous definitions of multimorbidity,
most authors engaged in this research agreed to reject
any concept which was insufficiently discriminating for
the selection of patients with the diseases in question.
This caused problems of interpretation, and problems for
the inclusion of patients, as well as imposing restrictions
and confounding factors7,17–20. This new and compre-
shensive definition which has been translated into Croatian
language encompass all definitions of multimorbidity
found in literature18 and is supposed to overcome previ-
ous limitations.

In general, any definition of multimorbidity is sup-
posed to take into account the cultural and social back-
ground in which FP’s live, work and take care of patients
in their practices, and in addition, encourage a holistic
approach which is, according to WONCA, the core com-
petency of patient-centered care in Family Practice8. The
purposes of a standardized and reproducible definition
are numerous. Therefore, its translation into other Euro-
pean languages is of great value for further research.

In relation to other studies on this topic performed
throughout the research network, i.e. translation to other
languages, there were no methodological differences.

Conclusion
The main result of our study is to have obtained a val-
idated Croatian version of the published English Mul-
timorbidity definition. This is important for all Croatian
medical research society as well as for other Family Med-
icine researchers in Europe.

Namely, like numerous other European countries, in
the last decade Croatia has been faced with the »epidem-
ics« of chronic diseases in the population of which FP’s
take(s) care of.

This had as a consequence increased scientific re-
search on chronic illness multimorbidity in Family Prac-

\begin{table}
\centering
\caption{First and Final Round Results}
\begin{tabular}{ll}
\hline Participant number & Lickert result first round \\
\hline 1 & 9 \\
2 & 9 \\
3 & 9 \\
4 & 8 \\
5 & 9 \\
6 & 8 \\
7 & 8 \\
8 & 9 \\
9 & 9 \\
10 & 8 \\
11 & 9 \\
12 & 7 \\
13 & 9 \\
14 & 9 \\
15 & 8 \\
16 & 7 \\
17 & 9 \\
18 & 9 \\
19 & 7 \\
20 & 9 \\
21 & 9 \\
22 & 9 \\
\hline
\end{tabular}
\end{table}

\begin{table}
\centering
\caption{The Original English Definition and the Backward Translation of the Final Croatian Version into English}
\begin{tabular}{ll}
\hline English original & Croatian backward translation into English \\
\hline Multimorbidity is defined as any combination of chronic disease with at least one other disease (acute or chronic) or bio-psychosocial factor (associated or not) or somatic risk factor. & Multimorbidity is defined as any combination of chronic disease with at least one other disease (acute or chronic), biopsychosocial factor (associated or not) or somatic risk factor. \\
Any bio-psychosocial factor, any somatic risk factor, the social network, the burden of diseases, the health care consumption and the patient’s coping strategies may function as modifiers (of the effects of Multimorbidity). & Any biopsychosocial factor, risk factor, social network, burden of diseases, health care consumption and patient’s coping strategies may function as modifier (of the effects of multimorbidity). \\
Multimorbidity may modify the health outcomes and lead to an increased disability or a decreased quality of life or frailty. & Multimorbidity may modify the health outcomes and lead to an increased disability, or decreased quality of life or frailty. \\
\hline
\end{tabular}
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RECIT TO NA HRVATSKOM – HRVATSKI PRIJEVOD EGPRN DEFINICIJE MULTIMORBIDITETA KORISTEĆI DELPHI TEHNIKU KONCENZUSA

SAŽETAK

Pacijenti, kada posjećuju svojeg liječnika obiteljske medicine (LOM) obično imaju više od jednog razloga odnosno problema. Sam multimorbitet kao pojam odnosno koncept, a također i suočavanje sa takvim pacijentom predstavljaju izazov za liječnike obiteljske medicine. Svjetska zdravstvena organizacija (SZO) je definirala multimorbitet, jedno-

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stavno, kao prisutnost dva ili više kroničnih stanja kod jednog/istog pacijenta. Međutim, ta se definicija ne čini primjerom konceptu cjelovitog pristupa pacijentu u obiteljskoj medicini. Stoga je, Europeka mreža istraživača u obiteljskoj medicini (EGPRN) sustavnim pregledom literature razvila novu sveobuhvatnu definiciju multimorbiditeta. Za praktično i šire korištenje, ta bi definicija trebala biti prevedena i na druge jezike, uključujući i hrvatski. Ovdje je predstavljen hrvatski prijevod te sveobuhvatne definicije koristeći Delphy tehniku koncenzusa za naprijed/natrag prevodenje. 23 stručnjaka, specijalista obiteljske medicine, koji tečno govore engleski bili su zamoljeni procijeniti kvalitetu prijevoda na ljestvici od 1 (apsolutno nezadovoljavajuće) do 9 (potpuno zadovoljavajuće) te obrazložiti svaku ocjenu nižu od 7. Definirano je da će koncenzus biti postignut kada 70% ocjena bude iznad 6 a zatim će se provesti prijevod s hrvatskog natrag na engleski koji treba biti potvrđen od strane samih autora definicije. Koncenzus je postignut već nakon prvog Delphi kruga sa 100% ocjena iznad 6 – prema tome, hrvatski je prijevod odmah prihvaćen. Autori definicije na engleskom prihvatili su prijevod natrag na engleski. Sveobuhvatna definicija pojma multimorbiditeta sada je dostupna na engleskom i hrvatskom jeziku kao i na drugim europskim jezicima što će zasigurno biti od velike koristi ne samo kliničarima i istraživačima već i stvarateljima zdravstvene politike.