

[TESTING OF IQEA ASSESSMENT TOOLS]

Results of piloting in Italy, Romania and Poland

Version 1.1 – July 2013



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BETA TEST – CARPI / ITALY

In May 2012 a “Beta-test” of IQEA assessment tools had been organized by ANS in Carpi (Emilia Romagna¹) with a group of participants to a training course for Family Assistants organized by the Municipality of Carpi.

Purpose of the testing was to try to submit the assessment questions as a final exam to a group of persons who had just terminated a formal training in order to see if the questions developed were too easy or too difficult, if they were understandable by participants and if the threshold defined (80% +1 or right answers) was accessible.

In this particular case, training for trainers was not provided since the trainers involved in the course on behalf of ANS had been involved in IQEA in all its stages, so they were fully aware of the methodology and the rationale behind it.

Participants to the testing were **12 women**, 5 were native Italian the others were migrants coming from EU (Romania, Poland, Lithuania) as well as non-EU countries (Santo Domingo and Pakistan). As said, they all attended a 138 hours training course covering the IQEA curriculum for a EQF 3 level.

Out of 12, **9 participants (equal to 75%)** passed the assessment with a threshold of 80% +1 of correct answers. Among them, 5 were Italian native speakers and 4 were not – therefore it seems reasonable to say that also the lexicon chosen was adequate to the level of knowledge. Still, only 3 out of 9 passed all areas. In all other cases at least one of the areas was failed.

The tests were submitted all together, as a final exam, in a 4 hours sessions.



1- Beta test of IQEA assessment tools- Carpi

According to teachers, the **weak points of the experience** were the following:

¹ Emilia Romagna is not among the Regions whose Administrations are partner of IQEA – it’s in fact the Region where ANS is located. The professional profile of Family Assistant, though, is very similar to the Sardinian one.

- the time was a bit high – especially for not native speakers – and however it was hard for a lot of them to keep their attention for such a long time. It is advisable to divide the exam in two sessions.
- Even if a large majority of students passed the exams with the 80% threshold, it is considered a bit too high. Indeed, some participants who seemed to be quite knowledgeable for ANS standards, failed to reach the 80% of correct answers.
- It could have been useful to give to learners the opportunity to familiarize with the different types of questions (fill the blanks, put in the right order a list of actions...) before the final exams, with trial-exercises during the course.

On the other hand, **positive drives** had been:

- The presence in the group of learners coming from Romania and Poland, which could have actually been interested in an acknowledgment of their training in their countries of origin
- The fact that the course was linked with an European project on ECVET was seen as an added value by the contracting administration and give to ANS the opportunity to re-affirm its role as innovator of social practices at community level.

TESTING SARDINIA

The testing in Sardinia was focused on two approaches:

▶ **IQEA in the framework of validation of informally acquired skills** – the project was applied in the framework of another project named SAP. SAP was an experimental project of Sardinia Region, aimed to give training opportunities to unemployed persons (both native and migrants) to give them the chance to find a job in the care field. Prior to the training, participants were submitted by operators of the public employment services to the validation of the skills they had informally acquired in the care field.

To those interested in mobility towards Romania and Poland, the operators (previously trained to use the IQEA methodology) offered the opportunity to be submitted to IQEA testing too. Therefore, this testing was mostly focused on the usability of the developed assessment tools.

The **training for trainers** took place in June 2012 – the participants were 23, mostly operators of public job centers and social workers from local NGOs supporting vulnerable groups to get in employment. The IQEA methodology and the ECVET system were illustrated and instructions on how to submit the IQEA tests were given.



2- Participants to the IQEA training for SAP operators

The **testing** took place from July 2012 to end of January 2013, all across Sardinia, and it involved 27 participants from different areas of the Region (Olbia Tempio, Cagliari and Nuoro). Among participants:

- 4 were Italians and 23 migrants
- 3 were males and 24 females



The outcomes of the testing were the following: 21 persons passed the overall assessments with a threshold of 24/32 or higher. Still, only 4 persons out of 21 passed all tests, while the rest failed at least one of the areas.

As in Carpi, also in Sardinia among those who failed the tests, half were Italian and the other migrants. Therefore, it could be confirmed that the language level was suitable and understandable even by non-native speakers.

3 - Letter of commitment to the testing - Sardinia

► **IQEA in the framework of formal VET courses:** in Sardinia, the testing of IQEA also involved VET Agencies who are registered with the Regional Administration to provide training and qualification for the “social and health care operator / assistant nurse” profile.

In this case, aim of the testing activities was mostly to understand the applicability of the IQEA methodology to the current VET practices (standard curriculum, assessment methods, usual planning of the courses) and to identify possible barriers and ways to overcome them.

The **training for trainers** took place in July 2012 and it involved **4 representatives** of three different VET agencies active in Sardinia in training of social and health care operators. Representatives from the partnership illustrated European VET policies and – more specifically – ECVET. Then it was illustrated how IQEA could implement ECVET and how this could benefit trainees and the agencies themselves. Then, it was explained how the IQEA testing should have taken place and the commitments requested to the agencies who decided to participate. At the end of the training, two out of three agencies agreed to be involved in the testing but – due to different scheduling of the courses – the results of only one course can be taken in account in this report.

After the training, continuing support was given to trainers and managers through a regular monitoring and exchange of opinion with IQEA partners on how to apply it in the design of training courses.

The **feedbacks** received were – generally speaking – very positive. It was indeed confirmed that the modules and the indicators of the “IQEA curriculum” fitted with the standard training project used by the Agencies. It was especially interesting to see that one of the agencies used the IQEA learning outcomes to plan a course for OSS that was approved and funded by Sardinia Region.

Some specific remarks concerned the description of the “Hygiene of environments” module, which appeared to be not completely consistent with the job profile of “social and health care worker”. Suggestions were collected on how it could have been re-phrased. Also, some of the indicators were questioned, as the one concerning “cooking meals” which was considered not fully applicable to the profile.

Regarding **the fitness of IQEA to the standard training project in use**, some differences were noted concerning the modules in which some of the indicators were taught:

- the capacity to re-make an occupied bed, is normally taught in the module “personal assistance” and not in “environmental hygiene”, as foreseen in IQEA.
- The indicators “Knowledge of principles, systems, styles and methods of communication” and “Capability to communicate in an appropriate way with the beneficiary and his/her family adapting her/his voice tone and posture according to the sensory deficit of the patient “ were taught in two different modules: the first under “communication” and the latter under “psico-relational aspects and care techniques according to the different types of beneficiaries”.

ECVET (i.e. the opportunities for students to have their competences acknowledged in mobility) was considered as an huge added value for the course and its attractiveness for students a competitiveness factor for the Agencies.

Concerning the **testing of the assessment tools**, 12 students did the testing. In the timeframe of the pilot testing, only some areas had been tested. Indeed, the tests were applied during an on-going course and only some of the modules where completed in due time to be included in this report:

- Environmental hygiene (applied on 3 students only)- 100% of students passed this test
- Professional ethic – only one student failed the test on learning outcome 3 (deontological code) – all the others passed 100% of the test
- Personal hygiene – 100% of students passed this test
- Communication – [the test was not submitted to students, but only checked by the trainer as students will only complete the module in October]

- **Comments from teachers were the following:**

- Concerning the section on PROFESSIONAL ETHIC – Test 4 “Legal liability and rules regulating the professional role”: the teacher suggest the two issues should be separated. Also, it was noted that the answer of question B (on the legal duty to try resuscitation) the answer could be both true or false, depending on the type of care worker it refers to. It’s therefore advisable to change the question, in order to make it more general.

- Concerning the section on PERSONAL HYGENE – a mistake in a threshold has been noticed. Also, the teacher found it difficult to do the simulation as doing it with 12 students would have been too time-consuming. Therefore, she decided to ask participants to write down the answers to the question.
- Concerning the section COMMUNICATION – the teachers commented that it is a bit poor compared to the deep knowledge that their students should get on the topic. Therefore they propose to integrate it with more questions, thus making it more fit for the purpose.
- On ENVIRONMENTAL HYGENE there were no specific comments. Teachers believe that the questions are suitable to assess the knowledge and skills of their students.

TESTING POLAND

The **training for trainers** took place in March 2013 in the Complex of Medical Post-secondary Schools in Warsaw. The participants were 5 teachers of the school and the headmaster. The training included presentation of the IQEA project, its goals and activities undertaken to achieve them. A big part of the training was devoted to presentation of identified learning outcomes, the ECVET system and the methodology of calculating the transfer points. The participants were also instructed how to submit the IQEA tests.



4- A lab in the school were IQEA was tested

The **testing of IQEA model** in Poland took place on 23 March 2013 in the Complex of Medical Post-secondary Schools in Warsaw.

Purpose of the testing was to try to submit the assessment questions in order to see if they were developed properly, if they were too easy or too difficult, if they were understandable by participants and if the threshold defined (80% +1 or right answers) was accessible.

- **The examined group**

Two groups doing two-year healthcare assistant programme for adults participated in the testing – one group doing the second semester and the other doing the fourth. Altogether 33 people completed the test.

Taking part in the test was not obligatory for the students and the results were not included in their regular assessment. Most students chose to do the test anonymously. The second semester group was quite motivated and treated the test as opportunity to check their knowledge and skills. The fourth semester group had a very negative approach, they were focused on criticizing the way some questions were formulated or their content. Quite often they skipped questions they didn't like what impacted negatively their results. Four persons after reading a couple of questions decided not to do the test.

- **Conclusions according to students**

The general remarks concerned:

- Some questions lacked instructions so it was not clear what to do- to mark one answer or more, or put them in the right order (e.g. first aid). It would be easier if all questions were preceded with uniform instructions.

- It was visible that the questions were developed in other country – among the others the choice of examples of food indicates that.
- Some answers were too obvious and sounded funny e.g. feather mattresses.
- In Poland healthcare assistant is not responsible for cleaning the care recipients house so many students skipped those questions.

Then some remarks were collected on specific questions / sections:

- In question 4 “Capability to help patient in care of hair and nails” it doesn’t make sense to explain the choice of order of activities since the order results from logic.
- Question 6 regarding “Capability to apply the basic principles of food hygiene” is not clear – how can food be stored at high temperature?
- In the question “For feeding passively a patient, which is the recommended comfortable position:” is not clear what the patient’s state is and whether he/she can be put on a chair.
- The answer to the question “To help an elderly person go down the stairs you should be:” is not that obvious –some sources recommend going next to the person you are supporting.
- The question “Your care recipient lives alone and you are in charge of taking care of his/her post. You:” is not clear – it is not known what is the care recipient’s state and whether you are authorized to read his/her letters.
- The questions regarding ethics mix up the issues of a care recipient’s rights and of a health assistant’s rights. They should be separated into independent questions.

- **Conclusions according to teachers:**

Comments from teachers were collected according to specific questions, as follows:

- The instruction how to assess whether the whole test is passed is not fully understandable.
- In the first indicator of PERSONAL HYGIENE the threshold is not set correctly – it is 11/14 but there are 13 questions so it should be 11/13.
- After question 2 (Undressing of an hemiplegic person) there should be options false/true given just like after question 1.

- The right answer to question 2 (“Capability to apply the basic principles of dietetics according to the different pathologies”) should be formulated differently e.g. should avoid food high in sugar. The present answer suggests that some quantities of food high in sugar are desirable.
- In the fourth indicator of NUTRITION AND FEEDING the threshold is not set correctly (2/2) the second question consists of 3 statements and in case of each a student should choose whether they are true or false. So altogether there is possibility to give 5 right or wrong answers.
- In the first indicator of PROFESSIONAL ETHIC there is no threshold set.

- **Results of assessment process:**

The tests took the participants from 45 minutes to 1 hour 35 minutes to do. The practical part was done during practical instruction classes and all participants passed all exercises apart from the exercise with lifters that second semester didn't have in the curriculum yet. As regard theoretical part, in most questions participants achieved the set threshold. The most problematic turned out to be exercises where it was necessary to put activities in order.

In the first group, the fourth semester, **12 people out of 18 passed all the modules**. The best results were achieved in “First aid” module – only one person didn't pass it. The most difficult turned out to be “Mobilization” module, mostly because of the question about the lifters – 5 people didn't pass it.

In the second group, the second semester, **only 6 people out of 15 passed all the modules**, mostly due to problems with “Mobilization” module (lifters) which was passed only by 6 participants. The best results were achieved in “First aid” module – all participants passed it. Very good results were also achieved in the modules “ Nutrition and Feeding “ , “Communication” and “Professional Ethics” – only one person (but not the same) didn't pass each of them.

Despite the total number of participants passing all the modules the results achieved in particular modules were surprisingly better in the second group, although it was the group that had not learnt the whole material yet. It was probably connected with the motivation and approach to the test which was described above.

TESTING ROMANIA

In Romania, the testing of the IQEA model was piloted on both qualifications involved in the project: Home caregivers and Healthcare assistants.

- **The IQEA model was tested in the framework of formal VET courses** organized by VET Agencies:

Asociatia Habilitas CRFP, which is a VET Agency authorized by the National Authority of Qualifications (ANC) to provide training and qualification for the “Home caregiver” profile, and Crucea Rosie Buzau (Red Cross Buzau), which is a VET Agency authorized by the national Authority of Qualifications (ANC) to provide training and qualification for the “Healthcare assistant” profile.

In this case, aim of the testing activities was mostly to understand the applicability of the IQEA methodology to the current VET practices (standard curriculum, assessment methods, usual planning of the courses) and to identify possible barriers and ways to overcome them.

The **training for trainers** took place in November 2012 and it involved also **representatives** from several VET agencies (Habilitas Association, The Red Cross Buzau, Proarmonia Foundation, The Association “Support, Mobility, Sheltering”). Representatives from the partnership explained European VET policies, the ECVET system and also the IQEA Project and the steps made so far. Then it was illustrated how IQEA could implement ECVET and how this could benefit trainees and the agencies themselves. Then, it was explained how the IQEA testing should have taken place and the commitments requested to the agencies who decided to participate. At the end of the training, two agencies – Habilitas Association and The Red Cross Buzau agreed to be involved in the testing with 2 courses (one for “Home caregivers” and one for “Healthcare assistants”) involving an overall of 19 participants.

After the training, continuing support was given to trainers and managers through a regular monitoring and exchange of opinion with IQEA partners on how to apply it in the design of training courses.

The testing took place between December 2012 and April 2013.

The **feedbacks** received were – generally speaking –positive. It was confirmed that the modules and the indicators of the “IQEA curriculum” generally fitted with the standard training project used by the Agencies, but there are some items that do not correspond to the Romanian training curricula. Specifically, the items of “**Mobilization**” regarding the use of the lifter are not adapted for Romania, as these lifters are not used

in hospitals or at home. Consequently, the students could not complete the two items regarding this aspect.

Some students appreciated that the items have too many answering modalities, and that the socialization and the emotional aspects of the care process should also be included.



5- IQEA testers in Habilitas

ECVET (i.e. the opportunities for students to have their competences acknowledged in mobility) was considered as an huge added value for the course from the point of view of the students involved in the testing. They would like to have their competencies acknowledged in other EU countries, as they say it might come an opportunity for them to work abroad. Therefore, in their opinion, this system would give them more working opportunities, more chances, and they would not be obliged to take more courses to acknowledge their competences in

the countries they would want to work.

Results of the assessment were the following:

- In the course for health care assistant, **7 persons out of 10** passed the exam
- In the course for home caregivers **6 persons out of 9** passed the exam

In both cases, though, the test was passed with a rather low mark (24 or 25 out of 32).

- **The IQEA model was also tested by the Habilitas Association with a group of Home caregivers who were trained in previous training courses for this profile and who are already working in this profession.**

Participants to the testing were **6 women**.

Out of 6, **4 participants (equal to 66%)** passed the assessment with a threshold of 80% +1 of correct answers. This threshold is probably too high, as the other 2 participants who have good skills and are working in this profession for a long time did not pass the test.

As an observation, for all three categories of participants, the best results were achieved for “Communication” and “Ethics” which shows a better cover of these subjects in the training courses, and the lowest results were in “Mobilization” which could mean that an improvement for this field could be envisaged in the training courses.

TESTING FRIULI VENEZIA GIULIA

► **Training for trainers:** The **training for trainers** took place in November 2012 and it involved **5 representatives** of three different VET agencies active in Friuli Venezia Giulia Region in training of social and health care operators. Representatives from the partnership illustrated European VET policies and – more specifically – ECVET. Then it was illustrated how IQEA could implement ECVET and how this could benefit trainees and the agencies themselves. Then, it was explained how the IQEA testing should have taken place and the commitments requested to the agencies who decided to participate. At the end of the training, three agencies agreed to be involved in the testing.

The testing with students took place in May and June 2013 and involved 121 students from formal training courses and was focused on two approaches:

► **IQEA in the framework of ex-ante evaluation** – IQEA Evo toolkit was applied to students at the beginning of the training course, to evaluate their starting knowledge and skills.

The **testing** involved 102 participants from courses for **health-care assistants** (OSS) organized by three different Agencies (namely ENAIP, CRAMARS and INDAR). The outcomes of the testing were the following:

ENAIP - starting test	58 persons
PERSONAL HYGIENE	90%
NUTRITION AND FEEDING	97%
MOBILIZATION	96%
MANAGEMENT OF HYGIENE AND LIFE ENVIRONMENTS	93%
FIRST AID	99%
COMMUNICATION	98%
PROFESSIONAL ETHICS	99%
TOTAL	96%

CRAMARS - starting test	20 persons
PERSONAL HYGIENE	70%
NUTRITION AND FEEDING	90%
MOBILIZATION	73%
MANAGEMENT OF HYGIENE AND LIFE ENVIRONMENTS	86%
FIRST AID	93%
COMMUNICATION	91%
PROFESSIONAL ETHICS	74%
TOTAL	82%

INDAR - starting test	24 persons
PERSONAL HYGIENE	73%
NUTRITION AND FEEDING	89%
MOBILIZATION	75%
MANAGEMENT OF HYGIENE AND LIFE ENVIRONMENTS	88%
FIRST AID	97%
COMMUNICATION	96%
PROFESSIONAL ETHICS	89%
TOTAL	86%

► **IQEA in the framework of evaluation in formal VET courses:** IQEA Evo toolkit was applied by the Agency CRAMARS to students at the end of the training course for OSS, to evaluate their knowledge and skills after the course. This **testing** involved 19 participants and the outcomes were the following:

CRAMARS - final test	19 persons
PERSONAL HYGIENE	79%
NUTRITION AND FEEDING	91%
MOBILIZATION	71%
MANAGEMENT OF HYGIENE AND LIFE ENVIRONMENTS	84%
FIRST AID	97%
COMMUNICATION	93%
PROFESSIONAL ETHICS	85%
TOTAL	86%

The aggregated data, concerning the percentage of successful answers, are as follows:

UNITS	ENAIIP (s)	CRAMARS (s)	CRAMARS (f)	INDAR (s)	TOT
PERSONAL HYGIENE	90%	70%	79%	73%	78%
NUTRITION AND FEEDING	97%	90%	91%	89%	92%
MOBILIZATION	96%	73%	71%	74%	79%
MANAGEMENT OF HYGIENE AND LIFE ENVIRONMENTS	93%	86%	84%	88%	88%
FIRST AID	99%	93%	97%	97%	97%
COMMUNICATION	98%	91%	93%	96%	95%
PROFESSIONAL ETHICS	99%	74%	85%	88%	87%
TOTAL	96%	82%	86%	86%	87%

► **Strengths and weaknesses identified by trainers**

Trainers noted that the test was very long and this problem has strained some students. All in all it took them about 1 hour and a half to do it, without practical tests.

Indeed, they administered practical tests rather summarily because they found it would have taken too much time. Another critical issues concerning practical tests was the different modality of response, especially for foreigners or people with low levels of education: better to homogenize response systems.

Generally speaking, come of the non-native Italian speakers found some difficulties with the language used in tests.

The evaluation system, in some cases, could be revised. For example enter as minimum score to pass the test 5 on 6 correct answers does not make sense because either you can commit errors 0 or 2 or more errors. In some cases, then, the minimum rating of some tests was 80%, but then the unit was necessary to have 100% correct answers and that made the judgments inconsistent with each other. The tests normally used by trainers in their courses are more homogeneous in the types of question / answer (usually a test with 4 choices).

Special attention should be given to the exercises including procedures: some were very long: it would be better to split them into more questions. In addition, they are often influenced by the protocols that

We found redundancy in some cases. Some tests had many indicators of competence and related exercises, a few other indicators and a few exercises.

A positive aspect is the fact that the teachers can use these tests for ongoing evaluation. That's why they thought to administer them twice, at the beginning and at the end of the course.

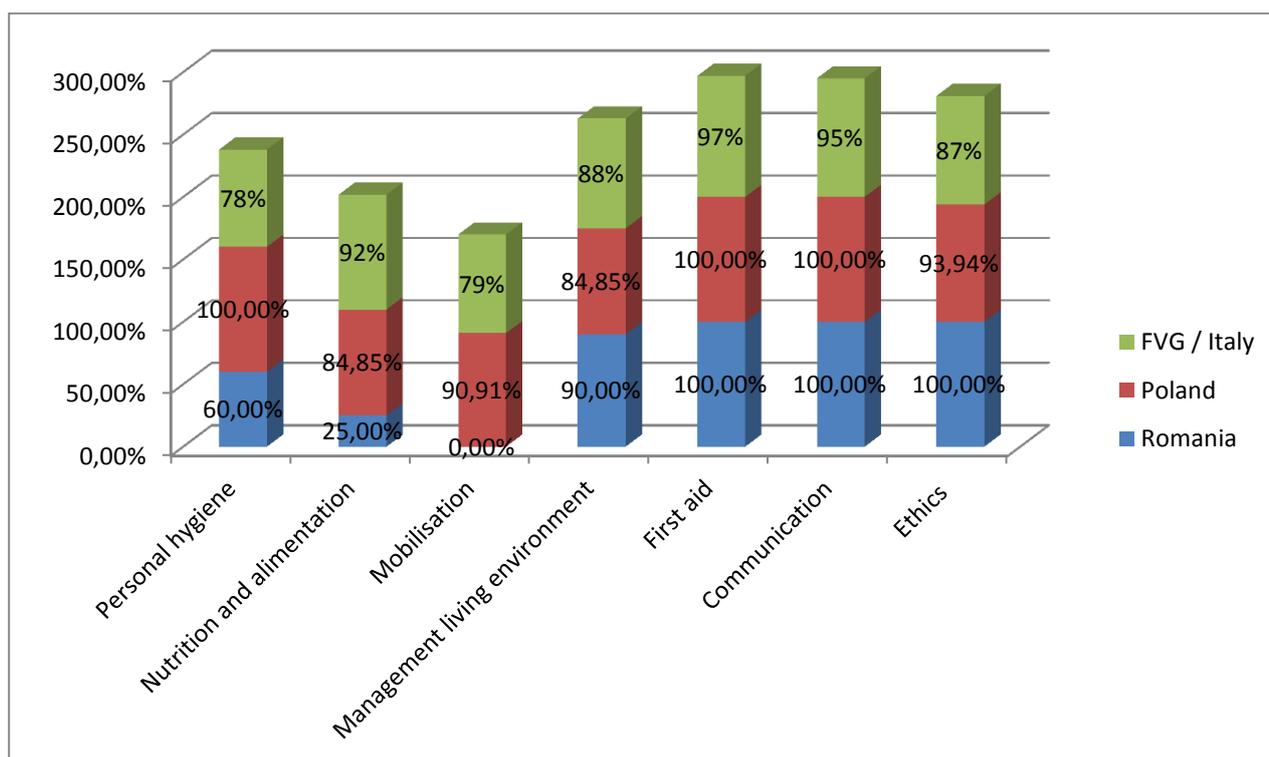
CONCLUSIONS

All together, the testing of IQEA tools involved **230 users** and **42 trainers and VET professionals** from different countries, professional experiences and training backgrounds. Therefore, it gave a good in-sight on strength and weaknesses of the model, together with a good amount of suggestions for its improvement and exploitation.

RESULTS

Given that the conditions and contexts where the test were given are quite different and so – as said – are the backgrounds of participants, we are now going to make some comparisons within the two groups (Health Care Assistants and Home Caregiver):

► Comparison of results according to the different topics – HEALTH CARE ASSISTANTS²

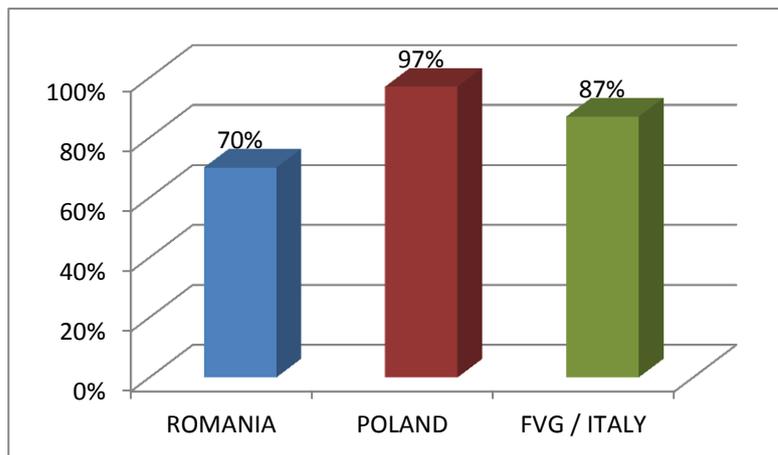


If we compare the different topics, we can see that the **most similar** results concerns: **management of the living environment, first aid, communication and ethics**, were the results of the three groups are rather similar. On the other hand, concerning personal **hygiene, nutrition and mobilisation**, the **Romanian results** appear to be **much lower** compared to Poland and Italy. Indeed, as far as mobilisation is concerned, none of the Romanian participants passed the exam. It should be noted, however, that the training of Romanian

² Sardinian results are not included as they refer to only three topics

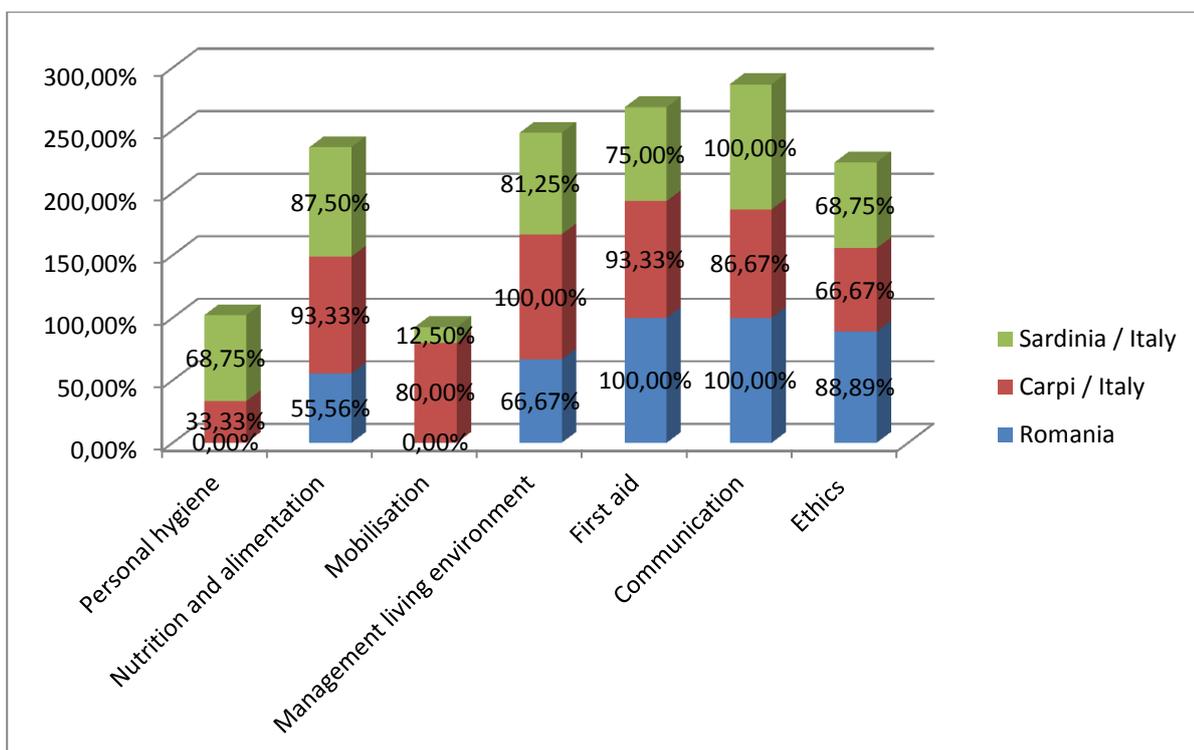
health care assistant is much shorter than that of colleagues from the other countries, therefore this might have an incidence on results. In the majority of cases the best results are achieved by the Polish group (note that concerning management of living environments some Polish students skipped the questions because this is not a responsibility of the Polish Health Care Assistant).

► **Overall results – HEALTH CARE ASSISTANTS**



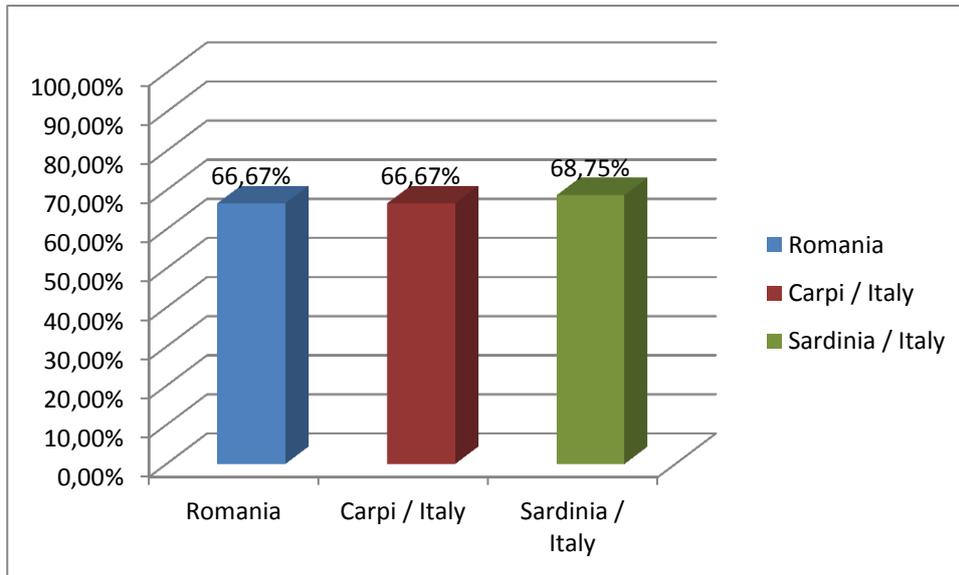
As a result, we can see that the large majority of Polish students passed the whole test, but also in the other countries **the percentage of globally positive results is high.**

► **Comparison of results according to the different topics – HOME CAREGIVER**



In the case of home caregiver, we register more balanced results in the majority of topics, with **only significant differences on personal hygiene and mobilization** (where all Romanians and a large majority of Sardinians failed, compared to an 80% of success rate in the Carpi group). Interestingly, there isn't a significantly "better" group as the best percentages change according to the topic.

► **Overall results – HOME CAREGIVERS**



Interestingly, in spite of the differences on single topics, the final success results are almost the same between the three groups. This might be due by the fact that the training students receives are pretty much the same, in terms of duration an contents.

It is also worth to mention that Sardinian students of this group did not attend a formal training course but went through a **process for validation of informally acquired skills**. The similarity of results with the other two groups confirms the usability of the tool both with formal and informal learning outcomes.

FEEDBACKS RECEIVED AND INPUTS FOR IMPROVEMENT

The practical use of IQEA tools with users and trainers gave us a huge amount of interesting feedbacks and suggestions for the release of a more accurate final version.

Besides from limited specific remarks like inaccuracies or unclear questions, the most relevant aspects that should be taken in account appears to be the following:

- A more balanced distribution of questions / type of exercises among the indicators. This would allow a more realistic assessment of skills. → Suggested action: revision of the number of options available for each indicator and development of some more questions for those considered more scarce (for instance, communication).

- More attention should be paid to the different cultural but also organizational backgrounds that might influence results → Suggested action: revision of some tests, especially concerning nutrition (that should be more adapted to the different cultures and habits) and mobilization (for instance lifters are not used everywhere).

CONCLUSIONS

In spite of all the differences among participants, we can conclude that – all in all – the IQEA assessment tools seem to be fit for purpose in all the three countries and with all the involved profiles.

Indeed, results show that globally the questions are neither too easy, neither too difficult – even considering the high threshold of 80% + 1 of correct answers to pass the test. Indeed, even if the tool seems to be more appropriate for the profile of home-caregiver, which shows most similarities, it is true that in the health care assistant groups – whose level of knowledge is supposed to be higher - we still have a percentage of students who did not pass all the quizzes.

Additionally, the system proved to fit also the needs of students and trainers participating to a validation of informally acquired skills process, thus extending the usability of IQEA also to this kind of contexts.

In conclusion, we consider that – after some corrections and modifications – the assessment tool can profitably be used to evaluate the basic skills of care workers willing to have their training acknowledged in another country .