

Working Group 2 Meeting Notes

Time: Thursday September 19, 2019 08:00 – 12:30

Place: ASST Santi Paolo e Carlo 3^oFloor, Sector C, Via di Rudinì, 8 Milano

WG Leader: Prof. Stephan Van Den Broucke

Participants: Ole Carstensen, Madalina Coman, Erhan Eser, Alain Garrigou, Nataša Janev Holcer, Janne Karttunen, Jarkko Leppälä, Eleni Petridou, Jose Rato Nunes, Bojan Srdjevic, Dov Zohar, Diana Lupulovic, Julie Sorensen, David Sullivan, Stephan Van Den Broucke, Ramona Suharoschi

Presentation on the WG 2 Topic literature review. Started with PRISMA guidelines. Develop review protocol [components of these listed].

LITERATURE REVIEW

Aim of the literature review to assess effectiveness of interventions for safety of farmworkers and to look at health literacy of workers. Assess the methodology of these interventions. Did they measure knowledge, competency relating to skills and abilities. What effective strategies could be used to increase agricultural safety and health.

Studies focused on injury prevention in agriculture (injury of health). Mental health studies were not included. Studies that just had knowledge as the focus were not included. Discussed Inclusion criteria-growers, did not include forestry or fishing. Only studies in English included.

Used PubMed, Scopus, others... to conduct search.

Developed list of search terms that included ag terms and methodology terms

Used CADIMA software for the reviews. Looked at methods, outcomes, etc... in review summary. Once completed will have a narrative synthesis [in process]. Started with around 3,000 articles, removed duplicates, ended up with 61 full text articles. Removed several because couldn't find articles. Left with 30, 9 more found from bibliographies of others. 39 full articles identified for review once various steps were completed. Did use snowball method. Most interventions not based on a theory- are not evidence-based? 16 had an intervention model that was mentioned. Those based on a theory had better results. Results presented in Dublin. Interest in publishing article in special issue on health literacy.

ACTION STEP: Circulate list of 39 articles to Working Group 2 to see if the group has missed any.

Jarkko asked about whether the manuscript is ready for publication in this quarter. Need to budget money for publication.

Agricultural health and safety interventions are challenging. Stephan discussed motivation and how that is an important component of behavior change. Group has been working on the survey, based on the Theory of Planned Behavior and incorporating the framework of Farm Safety Culture. Group used a simple Delphi Method to pilot the survey. Want to link farm safety culture measures with history of injury or health issues on the farm. Looked at particular prioritized behaviors on farms. Farmers might have to skip some section [for example, not every farmer has livestock-these questions would be skipped]. Questions on farm safety culture, barriers to improving health and safety on the farm. Questionnaire has been piloted in Serbia and Finland. Stephan has mentioned it would be helpful to look

at psychometrics. Might be a way of removing some questions to narrow it down. Piloting in Serbia- probably too many questions and some are confusing. Someone helped farmers answer the questions. This information will be useful to establish the protocols for data collection. What to do about questionnaire being in English. Will need to translate or only have a limited sample of farmers in the survey. Questionnaire in Portugal-interviewer had to only work with English speaking farmers. Jarkko translated questionnaire into Finnish.

Translating also problematic-can't translate words exactly.

Jarkko presented on piloting of WG2 survey. In two days, 20 surveys completed. Timed the questionnaires, took 50 minutes to complete. Gender break-down for survey participants: 33% female, 67% male. Types of farms Dairy 50%, Grain farm 45% (?). 92% did not have employees. 21% were full-time farmers.

70% had no accident on the farm in the past 10 years. A couple had had serious accidents.

Machinery handling - Stephan raised the question if reading the manual should be kept since it's the one that it is not discriminating much. The overloading the tractor question was discussed to be taken out.

Animal handling – added a scale for farmers that don't own animals – Stephan suggested to have it as a filter question “do you have animals?” and if not skip the section. Jarkko added two questions about fire safety and first aid kit. A suggestion would be to add examples in brackets for all items.

Chemical and pesticide handling – good section – again, have a filter question if they don't use chemicals or pesticides. Could have an inventory list-ask about this? Who should be asked this question? Stephan mentioned we cannot possibly include every scenario that could be imagined. Have to be flexible in order to not make things too complicated. Need to find a balance between covering many scenarios, but being generalizable enough that anyone can answer it. Stephan suggested circulating the survey for comments from the group.

Falls prevention – falls are a great risk. change the question with stairs and yards. Ole suggested including more global questions-especially from the Nordic questionnaire. Stephan said that they are included later on in the survey. Someone suggested measuring both level and strength of farm safety culture. Also a danger of stigmatization when you ask these questions. Two comments on pesticides-they are expensive so either farmer or individual specialized with using them do this. Could be an issue with Question #24-need to be specific regarding what you mean by “protective clothing”. Questionnaire misses opportunity to capture strategies that workers have been developed to address hazard exposures. Before each of the behavioral questions-ask a question about whether the person is personally responsible for this behavior/action. The more responses we get, the more we can determine whether responses are reliable.

Questions are also about factors underlying behaviors. These are largely focused on Theory of Planned Behavior Constructs.

ACTION STEP: Circulate the questionnaire for feedback from working group members. Reviewers should fine-tune the questions vs. including more questions or removing them. Use English that all can be fairly happy with.

Also would be good to pilot it regionally. Would need more funding to launch a statistically relevant data collection initiative. But we can at least, get the questionnaire tested and validated, at least. Also perhaps Johann could introduce some climate questions. What method should we use to collect data for the surveys? Maybe we can have students circulating these. We will need a similar method across countries, but we still need to decide what methods to use. Relevant to this question is what farms do we want to survey. What method-telephone, face-to-face, online... Needs to be feasible, financially feasible? Stephan will incorporate some of the suggestions already raised.

One way to make it shorter, is to have skip questions for those individuals where some of the questions do not apply. Also some questions on safety climate-what other farmers are doing relating to safety and health. What is the difference between safety culture and safety climate? Asking these questions in Denmark. Perhaps climate is a more global assessment? Questions on barriers, as well. Should we use a word different from "barrier". Stephan said this is not on the questionnaire-it's for the interviewer's. Use the work "obstacles" instead.

In the piloting phase, researchers should note method used to collect the data-online, face-to-face, etc... Should it be household based or individual based? In Ireland, they tend to ask the farm operator. Good point regarding face-to-face-could bias the responses. Might be better to have them take it online. Might be able to get more valid responses. Also using students is problematic. Sometimes they change the questions to make it easier for the respondent to answer the question. Different ability to understand questions in different countries. Suggest translating and back translating for each country. Also questions have to be culturally appropriate, may have to adjust the concept in the process.

Should we include questions for farmworkers? Working Group #3 is already doing this. Could have owners and workers take questionnaires, but only include workers in certain countries? Or focus on the individual or the organizational unit? If you wish to publish in a high-level journal, you need to do the back translation. Will take more time for forward, backward translating. That's why we need the cognitive debriefing-to make sure the adjustments in the wording are valid. Could also have several people doing translation and back-translation to compare across translations.

Stephan has asked-who is willing to do the process of translation and then the back translation? Croatia, Romania, Turkey, Finnish, Portugal, Serbia, France, maybe Denmark.

Question on whether the farmer has been injured. Does this include infections? Questions on illness? Some questions already refer to illness, such as use of PPE. Remember the purpose of the initiative is farm safety culture. Would be great to add a bunch of questions on illness, but this is not an epidemiological survey. Can certainly add a question or two that adds to the relevance.

One general question on the safety culture on the farm. On a likert scale from 1 to 5 the "what do you think it's the safety level at your farm?" – define the safety level first. What type of scale should we use?

Step #1-have work group review the questions for suggestions

Step #2- translate and back translate the questions

Step #3-do the data collection at the national level. We don't have to be completely representative. Can be a convenience sample. No agreement on sample size. Better to participate with a small sample than no sample.

Still need to determine method of collecting data. Many ways with pros and cons for each. Best to give farmers several options. Group is proposing to use mixed method online, but it can be complemented by individual face-to-face interviews. Jarkko proposed link to survey from the SACURIMA website. Or could use survey monkey.

Still have to decide to target the owner, workers or both. Are we sampling family farms, large farms, state farms? Could sample using farm ID number in Denmark. Stephan-need to decide whether we get involved in directed sampling or just using convenience sample. Let's try to get at least the two kinds in the sample (large and family farms). For the rest of the variables, let's just see what we get. Question about how you determine which is which. Could base it on Hectares? Work group members should use their best judgement for their country.

STSMs? Croatia suggesting sending a PhD student to Stephan who would work on questionnaire-looking at health literacy. Have student to analyze the data from the surveys. Ireland has a post-doc. Perhaps this person could take this STSM on. Or maybe the post-doc could be hosting the PhD student working on the STSM. Finland could also serve as a host country. France might have a PhD student who could work on the project. Turkey also interested in the STSM. Just need to determine who will do what. We would definitely have one STSM from WG2 in Finland or Ireland or Turkey focused on WG2 survey analysis.

Training school? One idea is to train farm experts on the WG2 survey. Need a training topic. Teagasc would be happy to have a training school on promoting health and safety through extension. Have a topic that incorporates all the groups? Perhaps introduce the concept of safety culture to the training school. Eleni mentioned someone from Bulgari who might be able to teach about this. Maybe have someone who has anthropology training?

Publications? WG2 Literature review will provide a publication in December. Could take data from the initial survey data collection and publish this next year. Need to identify a smaller work group for this. This paper could compare results from different countries, associations between injuries and constructs, safety culture measures. Conference papers also count towards this requirement. Turkey is doing a conference paper-topic is occupational health. Jarkko has one domestic conference paper. Jarkko will also try to do one conference paper.

EU Policy Recommendations:

Group is skeptical about Zero vision, but good to aim high

European Network-need funding

Funding for Horizon 2020-need funding

Develop and implement risk management in ag schools-why limit to ag schools? Because you want to teach this before they become farmers. In Finland-there aren't specific classes on ag safety. Incorporate it into existing curriculum, but include safety components to existing curriculum.

Improve Eurostat statistics-working group members should let Jarkko and Risto know about things to add on this recommendation.

In general, WG2 has not had time to really discuss these recommendations as a group. Can comment on an individual level.