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Report on end-user needs





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Authors (name and organisation)	Kristine Falk Pedersen (Center for
	Telepsychiatry) and Juan Carlos Torres
	Cantero (University of Granada

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Executive Summary

This document provides a report on the end-user needs including the technical specification for video-based counselling service and app based support in the STOP-project.

In order to develop the STOP intervention, focus group interviews, individual interviews and workshops were conducted with relevant stakeholders in both Denmark and Spain.

The focus group interview with the Spanish NGO's was completed on September 30, 2020 with six participants. The focus group interview with the Spanish women exposed to IPV was completed on October 6, 2020, with five participants. The focus group interview with the Danish NGO's was completed on September 8, 2020, with three participants. This was followed by three additional interviews with NGO's on the October 2, 2020, October 5, 2020 and November 2, 2020. The interview with the Danish woman exposed to IPV was completed on November 24, 2020.

The following were identified as the main aspects where the women are in need of support:

- Acknowledgement: The pregnant woman does not see herself as a victim of violence and finds it hard to accept.
- Ambivalent emotions towards the partner: They have a lot of dreams and hopes regarding their relationship, and this makes it hard to accept that their "life project" to create a family is broken.
- Fear of the system: Fear of losing custody of their child if they communicate their situation.
- Resources: Worries about being on their own, having to do everything on their own and without financial support from the partner.
- Low self-esteem: Finding it difficult to make decisions and taking actions to change their situation.
- Isolation: Rebuilding their connections and relations in the world, helping them identify their network and learn about the resources available for help.

The input from the end users has supported both the technical development and the development of the workflow for the intervention. The needs expressed by the end users in terms of the content of the counselling were similar to the ones described by Mary Ann Dutton's Empowerment model (Dutton 1992) and the Psychosocial Readiness Model (Cluss et. Al., 2006). These theories are used as the framework for the video counselling.

The user needs were translated into technical specifications for the video counselling software and the safety planning app.



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1. INTRODUCTION

1.1 Purpose of the document

The purpose of this document is to provide a eport on the end-user needs including the technical specification for video-based counselling service and app based support in the STOP-project.

1.2 Structure of the document

First, the findings from the interviews and workshops will be described, followed by a description of the STOP intervention and the content of the video counselling. Third, the technical specification for the video counselling service is described and lastly the technical specification for the safety planning app.

1.3 Glossary

IPV = Intimate Partner Violence

ISA = Index of Spouse Abuse (screening tool)

ASS = Abuse Assessment Screen (Screening tool)



2. FINDINGS FROM THE INTERVIEWS AND WORKSHOPS

In order to develop the STOP intervention, focus group interviews, individual interviews and workshops were conducted with relevant stakeholders in both Denmark and Spain. The relevant stakeholders were women exposed to IPV, midwifes and NGO's who work with victims of IPV.

The focus group interview with the Spanish NGO's was completed on September 30, 2020 with six participants. The focus group interview with the Spanish women exposed to IPV was completed on October 6, 2020, with five participants. The focus group interview with the Danish NGO's was completed on September 8, 2020, with three participants. This was followed by three additional interviews with NGO's on the October 2, 2020, October 5, 2020 and November 2, 2020. The interview with the Danish woman exposed to IPV was completed on November 24, 2020.

The stakeholders provided valuable information regarding their needs and concerns, which supported the development of the intervention, covering both the Video Counselling and Safety Planning app.

The following were identified as the main aspects where the women are in need of support:

- Acknowledgement: The pregnant woman does not see herself as a victim of violence and finds it hard to accept.
- Ambivalent emotions towards the partner: They have a lot of dreams and hopes regarding their relationship, and this makes it hard to accept that their "life project" to create a family is broken.
- Fear of the system: Fear of losing custody of their child if they communicate their situation.
- Resources: Worries about being on their own, having to do everything on their own and without financial support from the partner.
- Low self-esteem: Finding it difficult to make decisions and taking actions to change their situation.
- Isolation: Rebuilding their connections and relations in the world, helping them identify their network and learn about the resources available for help.

At the interviews, the stakeholders expressed that in order to help the woman acknowledge her situation it is very important that the counsellors listen to her, hear her story and gain her trust. Some of the stakeholders were concerned that conducting counselling via video might create a distance and make it harder to gain the women's trust. Others believed it might make it easier to talk about the difficult subjects because of the distance. They were also concerned about if and where the woman would be able to conduct the video counselling, due to a controlling partner or lack of access to Wi-Fi. Some of the concerns regarding the use of video counselling have been addressed in the training sessions to make sure that the counsellors feel comfortable with using the technology and they have received specific training for having difficult conversations and building trust via video.



Both the women, midwives and NGO's were presented with an example of a safety planning app (MyPlan), and were asked to provide feedback. They identified the features in the safety planning app that they found useful for women exposed to IPV. All the stakeholders agreed that it is very important for the app to be camouflaged so the partner will not be suspicious and realize the actual purpose of the app.

All the stakeholders agreed that a full recovery is often a long process that can take years and often the violence continues after the woman leaves the violent partner. Therefore, it was said that if the STOP-intervention is a limited service, it is important that the women receive support and are encouraged to seek treatment elsewhere.

3. INCORPORATION OF USER NEEDS

The user needs have been used to develop and adjust the video counselling service and the safety planning app. Furthermore, the user needs have contributed to the optimization of the workflow related to the intervention and the theoretical framework for the video counselling sessions. This section will describe the content of the pre-session, the themes of the video counselling sessions and how they address the user needs.

3.1 Pre-session

The content of the pre-session in Spain and Denmark are the same. In Spain, the pre-session is conducted by phone call, and in Denmark it is a meeting in person.

It is important to establish trust from the beginning, so the women does not reject the project and the opportunity of support.

One of the concerns addressed by the end-users was the video counselling and where this could actually be conducted in case of a controlling partner. This concern has been translated in to specific questions that are important to talk about with the woman before addressing her situation. The purpose is to make sure that both the woman and the counsellor are comfortable participating in the video consultations and for that to happen the following questions will be discussed:

- From which physical locations the woman can safely participate in the video consultation?
- The counselling sessions is confidential, and only the woman is allowed to participate.



- How long time the video consultation is scheduled for.
- The woman's explanation to her partner if asked about the counselling sessions
- The procedure if the woman does not "show up" for the video consultation.
- The procedure if the video consultation is interrupted, e.g. technical problems or partner/other enters the room.

For the pre-session, it is recommended to test the technology (Video software and safety planning app) to make sure it works and the woman feels comfortable using it.

3.2 Video counselling: theoretical framework and content

Based on the input from the workshops with midwives and NGO's it became evident that the STOP-intervention has its limitations in terms of duration and depth of the counselling. Therefore, it was decided to offer the women six individually tailored video counselling sessions with specific themes to maximize the potential benefit of each session. As six video counselling sessions will not be enough to fully recover from IPV, the focus of the video counselling will not be full recovery but to:

- Clarify and assess the situation of the pregnant woman
- Help the pregnant woman acknowledge that she is in a violent relationship
- Guide and encourage the pregnant woman to seek further treatment and help.

In the process of uncovering theoretical frameworks for IPV interventions, it became clear that the needs expressed at the interviews and workshops with the stakeholders could be aligned with the theoretical frameworks of Mary Ann Dutton's Empowerment model (Dutton 1992) and the Psychosocial Readiness Model (Cluss et. Al., 2006). These theories are used as the framework for the video counselling.

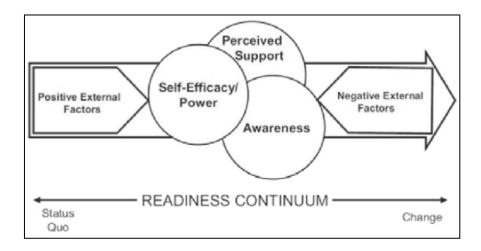
Dutton's Empowerment model consists of 14 principles that are necessary in an effective intervention for women exposed to IPV:

- To offer a non-judgemental acceptance and validation of the battered woman and her experience.
- 2. Providing immediate support and alliance.
- 3. Advocating for safety and building options.
- 4. Willingness to experience recounting and sequelae of the trauma.
- 5. Assuming that posttraumatic stress responses are caused by the traumatic events.
- 6. Education about violence and abuse it therapeutic.



- 7. Coping strategies are viewed as strengths, not pathology.
- 8. In trauma victims, substance abuse is a common form of self-medication.
- 9. Transformation of the trauma may result in positive changes.
- 10. Prosocial action and self-disclosure facilitate the stress recovery process.
- 11. Transformation of trauma is a lifelong process.
- 12. The trauma of abuse and victimization results in non-compensable losses.
- 13. Assumption of self-determination (Respect the woman's choice).
- 14. Therapist self-care is essential (supervision).

The process of change for victims of IPV can be described as the psychosocial readiness model below. This model considers readiness as a continuum that ranges from robustly defending status quo to being ready to take action towards change (Cluss et. Al., 2006). Movement towards and away from change is a result of a dynamic interplay between internal factors and external interpersonal and situational factors. The internal factors are awareness, perceived support and self-efficacy (Cluss et. Al., 2006).



Awareness:

People exposed to violence often doubt or do not think that they are in fact exposed to violence, and even very extreme incidences of violence can be excused. Especially psychological violence is difficult to express and define. People exposed to violence are often under the impression that it is their own fault. Education about violence and abuse it therapeutic. In the project, this means



that the counsellors will evaluate the abusive behavior of the relationship and educate the woman about violence and abuse.

Perceived support:

As mentioned in section 2, the women worry about being on their own, having to do everything on their own and without financial support from the partner. They are often isolated and need support rebuilding their connections and relations in the world, and help to identify their network and learn about the resources available for help. In the project, this means that the counsellors will counsel the woman about her own safety plan, her private network and available professional resources.

Self-efficacy:

Change is necessary to break free of a violent relationship. For change to happen it requires: motivation, understanding, belief and skills. Practical change (e.g. housing) is important, but it is not sufficient. Changes within the person (the internal factors) are essential for lasting changes. The goal is to decrease feelings of powerlessness and lack of self-esteem within the woman, and increase the feeling of empowerment and self-efficacy. In the project, this means that the counsellors will counsel the woman about her self-esteem, fears, choice making and problem solving.

Each video consultation can be categorized under one of the internal factors:

Video counselling sessions

Awareness: Session 1. Evaluation of the abusive behavior.

Perceived support: Session 2. Safety Planning; network and resources.

Awareness: Session 3. Psychoeducation.

Self-efficacy: Session 4. Self-esteem.

Self-efficacy: Session 5. Empowerment: fears.

Self-efficacy: Session 6. Empowerment: choice making and problem solving.

When working with a woman exposed to IPV, it is important to recognize her stage of change and support her accordingly. The structure of the video counselling sessions above is not 'set in stone', and can vary from woman to woman, depending on her stage of change, and needs for support.



3.3 Supervision

The 14th principal of Mary Ann Dutton's empowerment model describes how therapist self-care is essential. This principal is also in alignment with a need expressed by the NGO's interviewed: It is important for the counsellor to be involved in an emotionally supportive environment and in routine self-care activities outside the therapeutic context.

In the STOP-project, this need has been translated by arranging for the counsellors in the STOP-project to have frequent supervisions with a psychologist who has experience working with IPV. At the supervision, the video counselling sessions of the week will be reviewed and possible problems will be addressed. If deemed necessary, the counsellors can request additional meetings at any time for any question, support or review.

4. TECHNICAL SPECIFICATION: VIDEO COUNSELLING

In the following section, the technical specifications about the video system will be described.

From the women's perspective:

- They need a system where the video calling is simple, and without unnecessary functions.
- They need a system that their partners will not find suspicious.
- They need a system that works on Wi-Fi, 3G and 4G.
- They need a system that works on their smartphone (android and iOS)
- They need a system that works on old mobile phones.

From the counsellor's perspective:

- They need a system where the booking and video calling is simple and without unnecessary functions.
- They need a system where they are in charge of starting the video call, so the women can not call anytime they want.
- They need a system where they can share their screen, e.g. show a specific figure to the women.
- They need a system that works on tablet and computer.

From the systems perspective:

- GDPR Compliant: The system needs to be compliant with General Data Protection Regulation (GDPR).
- Confidentiality: The system needs to grant privacy of the data (secure storage, no sharing with third parties etc.) or be based on a mesh architecture, which means that video, voice and text data cannot be stored on any server at the end of the communication.



- Encryption: All communications needs to be encrypted via an SSL certificate (HTTPS).
- Accessibility: If browser based the software has to work on the available browsers (e.g. Chrome 69+, Firefox 52+, Edge 79+, Safari 11+ and Opera 56+).

Video software in Denmark:

In Denmark, the video counselling will be done using the software My Hospital (Mit Sygehus). My Hospital is developed by the Danish company MedWare, and is developed specifically for hospital-patient communication in the Region of Southern Denmark. The counsellors' end of the software is browser based, and the patients' software is both browser based and app-based (iOS and Android). My Hospital was chosen because it meets all of the requirements set out for the STOP intervention based on the user needs. Furthermore, it is already implemented and being used in antenatal care as a regular communication tool. When the pregnant woman gets in contact with the hospital in relation to her pregnancy, she will be introduced to My Hospital, regardless of whether she is enrolled in the project or not. This was found most safe for the woman as this system will minimize potential suspicion from the partner.

To use My Hospital, the midwives create an account for the woman in the system, based on the woman's social security number. The midwives create a booking for a video call with the woman. The woman downloads the app or logs in to the system via browser. 15 minutes before the video call is booked to start, the woman receives a notification to accept the call. Once the woman has accepted the call, the midwife can start the video consultation.

Video software in Spain:

In Spain, the video counselling will be done using the browser based software Linkello. Linkello is a commercial software from the French company Bistri. Bistri distributes two video applications: Linkello pro and Linkello Medical, the latter being used in the STOP-project. In the process of identifying this software, seven different video software have been studied and tested with focus on confidentiality and usability. Linkello was chosen because it meets all the technical specifications set out for the STOP intervention based on the user needs. The other systems were disqualified because:

- The system failed to run on older mobile phones.
- The company did not grant privacy and stored personal data (One company reserved themselves the right and license to use, modify, publicly perform, publicly display, reproduce, and distribute data on and through the website).
- Connection data would be stored on servers outside of Europe and it was not possible to get a Data Management Agreement.



- The system required instalment on a private server, which poses other problems such as disponibility and need of maintenance.
- The company's business model was not clear.

To use Linkello, the psychologist creates a new link for each video consultation, each with a duration of 24 hours. The psychologist sends the link to the woman (via text message, WhatsApp, email) on a time agreed with the woman (e.g. 5 min. before the consultation). The woman clicks on the link to participate in the video call, via phone or on computer. After the video call, the woman deletes the link she has received and any browser history about the call, to ensure the partner will not be aware of the call.



5. TECHNICAL SPECIFICATION: SAFETY PLANNING APP

In the following section, the technical specifications for the safety planning app will be described.

From the women's perspective:

- The system needs to be easy use, and without unnecessary functions.
- Their partners must not find the system suspicious.
- The system needs to works on Wi-Fi, 3G and 4G.
- The system needs to work on their smartphone (android and iOS)
- The system has to work on older mobile phones.
- The system has to have a log in function to a private account
- The system needs to be in either Danish or Spanish.

From the systems perspective:

- GDPR Compliant: The system needs to be compliant with General Data Protection Regulation (GDPR).
- Confidentiality: The system needs to grant privacy of the data (secure storage, no sharing with third parties etc.).
- Encryption: All communications need to be encrypted via an SSL certificate (HTTPS).

The safety planning app in the STOP-project:

In the context of the STOP -project it was decided to carry out a mapping of the market of safety planning apps and use an already existing safety planning app and modify it to fit the context based on the user needs assessment. A few apps were found and studied. This included a few safety planning apps from the US, one for people exposed to violence, one for veterans and one for people at the risk of suicide. None of the apps were in both Danish and Spanish or developed for the STOP-projects specific target group: pregnant women exposed to IPV.

A Danish app, MyPlan, was chosen for the STOP-project. MyPlan is developed by the Danish company MyPlan.org and is a safety planning app for people in a crisis. It is not developed specifically for pregnant woman exposed to IPV, but MyPlan.org is used to collaborating with different research on projects where they modify the app to fit the context. As the app company is Danish and therefore within the borders of EU, it was also easy to get a Data Processing Agreement within the limited timeline for the project's development phase.

This app already included the most important features that were identified by the users: strategies and contact/resource module. The app was presented to the previous mentioned stakeholders for feedback. It contained many unnecessary features, which has been removed (mood tracking, peer-stories, hope-box etc.). The following features are included in the app, based on the stakeholders' needs:



- Contact information on local and national resources
- Contact feature for the woman to add her own selected network
- Warning signs
- Strategies
- Share my location
- Quick message
- And map showing nearest helping organisation /shelter

The stakeholders also requested a quick exit button, a camouflage page, so the partner would not be able to recognise the real purpose of the app and a feature with specific knowledge about partner violence.

The stakeholders had one request that was not possible to accommodate do to she short development phase, which was the counsellors' access to the women's apps and the possibility of them entering information directly in the app. This feature could be relevant to consider if further development will be made. .



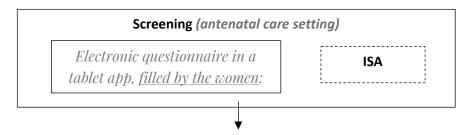
6. REFERENCES

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- Dutton, M. A. (1992): *The Framework for Intervention with Victims and Survivors of Domestic Violence*, Empowering and Healing the battered woman, Cap. 6.



7. APPENDIX 1

The workflow of the intervention is very similar in Spain and Denmark. The following figure shows the different steps of the intervention in Spain:



Pre-session

The <u>psychologist</u> contacts the woman by phone call (in the first days after screening):

- Informed consent.
- App download (safety planning app).
- Pre-intervention evaluation
 - → Measure of Victim Empowerment Related to Safety Scale (MOVERS)
 - → Edinburg Postnatal Depression Scale (EPDS)
 - → Safety Action Checklist
- Introduce the video system and schedule the first video consultation.
- Six individually tailored video counselling sessions
- One hour, every 15 days
- Followed by mHealth ongoing support (safety planning app)

Video counselling sessions

Session 1. Evaluation of the abusive behavior.

Session 2. Safety Planning; network and resources.

Session 3. Psychoeducation.

Session 4. Self-esteem.

Session 5. Empowerment: fears.

Session 6. Empowerment: choice making and problem solving.

Post-intervention evaluations (1 month after video counselling)

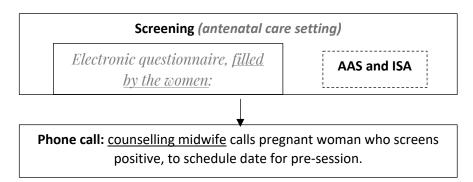
- ✓ Measure of Victim Empowerment Related to Safety Scale (MOVERS)
- ✓ Edinburg Postnatal Depression Scale (EPDS)
- √ Safety Action Checklist
- ✓ Index of Spouse Abuse (ISA)

Acceptability and feasibility of video counselling and APP (1 month after quantitative evaluation)

Semi-structured and in-depth individual interviews: five women and the psychologist.



The following figure shows the different steps of the intervention in Denmark:





Pre-session

The counselling midwife and the pregnant woman meets in person to talk about:

- Informed consent.
- App download (Video software and safety planning app).
- Pre-intervention evaluation
 - → Measure of Victim Empowerment Related to Safety Scale (MOVERS)
 - → Edinburg Postnatal Depression Scale (EPDS)
 - → Safety Action Checklist
- Schedule the first video consultation.
- Six individually tailored video counselling sessions
- One hour, every 14 days
- Followed by mHealth ongoing support (safety planning app)

Video counselling sessions

Session 1. Evaluation of the abusive behavior.

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Session 3. Psychoeducation.

Session 4. Self-esteem.

Session 5. Empowerment: fears.

Session 6. Empowerment: choice making and problem solving.

Post-intervention evaluations (1 month after video counselling)

- ✓ Measure of Victim Empowerment Related to Safety Scale (MOVERS)
- ✓ Edinburg Postnatal Depression Scale (EPDS)
- ✓ Safety Action Checklist
- ✓ Index of Spouse Abuse (ISA)

Acceptability and feasibility of video counselling and safety planning app (1 month after quantitative evaluation)