

# The effect of the “Joining Uncertainty Management & Meaning Making Program” to promote patient-centered care in hematopoietic stem cell transplantation

<b>Submission date</b> 23/02/2025	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
<b>Registration date</b> 20/04/2025	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input type="checkbox"/> Results
<b>Last Edited</b> 27/02/2025	<b>Condition category</b> Other	<input type="checkbox"/> Individual participant data <input type="checkbox"/> Record updated in last year

## Plain English summary of protocol

### Background and study aims

The study team have developed and implemented an uncertainty-management program based on meaning-making and evaluated the effect of the program on uncertainty, personal growth, healthcare empowerment, and self-efficacy.

### Who can participate?

Patients undergoing hematopoietic stem cell transplantation aged between 18 and 69 years old

### What does the study involve?

The intervention program included seven sessions. In the first session, participants learned how to use a smartphone app to check their blood count and scan QR codes. They were given help to install the app and shown how to use it. Throughout the program, they received ongoing education and support through phone calls or face-to-face meetings. The team also checked if participants were using the educational materials and provided extra help if needed. Regular phone calls were made to answer any questions and support them through the transplant process.

### What are the possible benefits and risks of participating?

This study is expected to contribute to the literature by showing that interacting with medical professionals and receiving information and education at the patient’s level of understanding and treatment condition effectively decreases uncertainty and helps them find meaning in a difficult journey.

This study is not an intervention involving medication or treatment, but rather counseling and education with patients, so participation is not expected to cause harm. However, the consent form states that if the patient withdraws consent or wishes to discontinue it, he or she may express his/her intention.

Where is the study run from?

The study is hospital-based at the Asan Medical Center, South Korea, but interaction will occur at any time when participants need help.

When is the study starting and how long is it expected to run for?

January 2019 to December 2025

Who is funding the study?

Asan Medical Center, South Korea

Who is the main contact?

Mrs Young-shin Lee, lysinkorea@amc.seoul.kr, lysinkorea@gmail.com

## Contact information

### Type(s)

Public, Scientific, Principal investigator

### Contact name

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## Additional identifiers

### Protocol serial number

20191128

## Study information

### Scientific Title

Development and evaluation of joining uncertainty management & meaning making program for hematopoietic stem cell transplantation patients

### Study objectives

Hypothesis 1: The level of uncertainty in the experimental group, who participated in the uncertainty-management program based on meaning-making, will become distinctively different over time from that of the control group.

Hypothesis 2: Compared to the control group, the level of personal growth will be higher in the experimental group, who participated in the uncertainty-management program based on meaning-making.

## **Ethics approval required**

Ethics approval required

## **Ethics approval(s)**

approved 28/11/2019, IRB committee, Asan Medical Center (88, Olympic-RO 43-GIL, Songpa-Gu, Seoul, 05505, Korea, South; +82-2-3010-7166; irb@amc.seoul.kr), ref: S2019-2341-0002

## **Study design**

Nonequivalent control group non-synchronized quasi-experimental design

## **Primary study design**

Interventional

## **Study type(s)**

Safety, Efficacy

## **Health condition(s) or problem(s) studied**

Meaning-making to an intervention program for managing the uncertainty of patients undergoing HSCT

## **Interventions**

Based on previous study findings, an intervention program was constructed comprising seven sessions. Session 1 took about 30 minutes. To begin the JUM3P, participants had to understand how to check their blood count using a smartphone app and how to scan a QR code. Thus, about 20 minutes were spent helping install the program and checking to see if patients could use the tool on their own. In addition, a demonstration was given when patients had difficulty understanding. From then on, patients were continuously educated and provided consultation through phone calls or face-to-face interviews regarding their areas of concern. It was also checked whether they had looked at the educational content using the QR codes. Those who had forgotten how to use the QR codes were re-educated and given verbal additional information in an orderly fashion. The network with the patients was maintained by visiting with them via phone calls when it was expected they would have questions or a hard time coping with the transplant process.

## **Intervention Type**

Behavioural

## **Primary outcome(s)**

The following primary outcome measures are assessed at T1 (baseline at enrollment), T2 (before conditioning regimen for HSCT), and T3 (one week after discharge):

1. Uncertainty measured using the Mishel-Uncertainty of Illness Scale (MUIS)
2. Personal growth measured using the Growth through Uncertainty Scale (GTUS)
3. Healthcare competency measured using the Health Care Empowerment Inventory (HCEI)
4. Self-efficacy measured using the General Self-Efficacy Scale (GSE)

## **Key secondary outcome(s)**

There are no secondary outcome measures

## **Completion date**

31/12/2025

# Eligibility

## Key inclusion criteria

1. In-patients undergoing allogeneic HSCT for the first time after being diagnosed with a blood disorder
2. In-patients and out-patients preparing for allogeneic HSCT
3. Men or women between the ages of 18 and 69 years

## Participant type(s)

Patient

## Healthy volunteers allowed

No

## Age group

Mixed

## Lower age limit

18 years

## Upper age limit

69 years

## Sex

All

## Total final enrolment

35

## Key exclusion criteria

1. A person with a psychiatric history or currently receiving treatment for a psychiatric disorder
2. A person undergoing emergency HSCT
3. A person needing a caregiver's help due to a weakened physical condition at the time of recruiting the research participants

## Date of first enrolment

28/11/2019

## Date of final enrolment

02/11/2021

# Locations

## Countries of recruitment

Korea, South

## Study participating centre

**Asan Medical Center**  
88, Olympic-RO 43-GIL, Songpa-Gu  
Seoul  
Korea, South  
05505

## Sponsor information

**Organisation**  
Asan Medical Center

## Funder(s)

**Funder type**  
Hospital/treatment centre

**Funder Name**  
Asan Medical Center

## Results and Publications

### Individual participant data (IPD) sharing plan

The datasets generated during and/or analysed during the current study are/will be available upon request from Young-shin Lee, [lysinkorea@amc.seoul.kr](mailto:lysinkorea@amc.seoul.kr), [lysinkorea@gmail.com](mailto:lysinkorea@gmail.com). Participants were notified that their information would be kept confidential and would not be used for any other purpose except for the research.

### IPD sharing plan summary

Available on request

### Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Participant information sheet</a>			25/02/2025	No	Yes