



# Sun therapy rooms in old people's homes

Experiences of residents and staff

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R&D center Fyrbodal<sup>1</sup>, which conducted the present research assignment, is a meeting place, broker and engine for operationally based research, development and training activities in primary and local health-care services in Fyrbodal (north-western Götaland) and in collaborative care involving all the players in the Fyrbodal health care and medical services.

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## Summary

For several years now, pensioners living in old people's homes in Vänersborg Municipality have had the opportunity to spend time in "sun therapy rooms" produced by a company called Suntech AB. The municipality and the company contacted FoUU-centrum Fyrbodal to discuss the possibility of studying the residents' and staff's perception of the importance of using the sun therapy rooms. A project group was set up to define the study objectives. The researchers chose to use focus groups as the methodological approach.

The findings reveal that time spent in the sun therapy room is considered to have a positive impact on the elderly residents' mental and physical health. Moreover, the anticipation before a visit to the sun therapy room and the memories afterwards appear to perform an important social function. On the whole, the statements made by the focus groups are extremely positive about the time spent in the sun therapy rooms and the effects this has.

The findings indicate that it would be expedient to carry out larger, more in-depth studies in the future.

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# **Sun therapy rooms in old people's homes – experiences of residents and staff**

(Bäck-Pettersson, Pettersson, Kylén & Marklund, 2015)

## **Background**

Health trends among the elderly have been positive for many decades, life expectancy increased throughout the 20th century and around 18 per cent of the Swedish population are now 65 and over, equivalent to slightly more than 1.6 million people. Many of these people are physically inactive, take part on a smaller scale in different cultural and club activities and are insufficiently stimulated by their daily lives. The results of a public health survey carried out in the County of Stockholm in 2010 reveal that three in ten people in the 65+ age group report mild or severe nervousness, worry and/or anxiety. However, maintaining a high level of mental, physical and social activity, among other things, can have a positive impact on health and quality of life throughout life. Measures to promote good health and prevent ill-health are particularly important in the case of elderly people.

We know that the sun has a positive effect on our senses and our body; countless studies and 50 years of charter holidays to sunny beaches are testimony to this. At Swedish latitudes, we only have sun for a limited period of the year. Many elderly people are not financially or physically able to travel south during the six months of the year when there is little sun in Sweden. Sunbathing in a solarium has been found to be questionable from a health perspective and is usually not suitable for elderly people. However, the Vänersborg-based company, Suntech AB, has come up with an alternative to expensive trips to sunny climes and dangerous solaria.

The artificial sunlight Suntech has developed is backed by 14 years' experience. This unique "sunlight" reproduces the sun's full spectrum and was originally used by the automotive industry to simulate solar radiation in tests. It was subsequently adapted to suit us humans and complies with all the official safety criteria. The sunlight is complemented by the kind of environments we humans long for, i.e. locations such as Mauritius, Thailand or Sweden's west coast. Using the sound of waves or the cries of seagulls; winds that provide a pleasantly cooling breeze; soft, warm sand; and timber decking that smells of linseed oil, these environments are replicated as fully as possible to have a positive impact on all the senses and provide an holistic experience. A panoramic view of the location forms the backdrop. To date, around 50 sun therapy rooms have been installed in elderly care facilities throughout Sweden and it is hardly surprising that Vänersborg Municipality is leading the way as the place with the highest density of sun therapy rooms in the world.

A large number of newspaper, radio and TV features and many personal accounts from residents and staff have clearly shown that the quality of life of the elderly people is enhanced. To prove this scientifically, we conducted a study among people with experience of spending time in a sun therapy room of this kind.

## **Objective**

To describe the experience and importance of spending time in a sun therapy room for elderly people's well-being.

# Method

Business-driven research is based on companies' specific knowledge development needs. It often requires the research to be carried out in collaboration between researchers and practitioners. Wherever possible, questions and studies should be formulated in partnership. This enables a shared interdisciplinary change of perspective that can lead to action-oriented knowledge. The implementation of research findings is facilitated by common starting points. Another effect of the collaborative research method is that it leads to continuous knowledge development for staff and managers in companies and employees in the research community.

## ***Methodological considerations***

The societal pressure on organisations to change is leading to increased dependence on constant improvement and continuous innovation. An increasingly common way of developing this change competence is to involve researchers, customers and users in joint projects. In the “Sun Project”, researchers from FoUU-centrum Fyrbodal worked with employees from elderly care facilities in Vänersborg Municipality (who use the sun therapy rooms) and the management of Suntech (the company that manufactures the sun therapy rooms) to arrive at the research objective and question. The selected overarching method was a variant of the Bartunek and Louis method developed in a collaborative project involving a research group at Chalmers University of Technology in Gothenburg and the pharmaceutical company, AstraZeneca (1). The starting point is that a research team is put together to comprise people who are extremely familiar with the context/phenomenon to be studied, i.e. they understand the process/phenomenon from the “inside”. This insider expertise has been provided by representatives from

Suntech and the municipality. The researchers perform the role of experts who have a generic knowledge of the phenomenon being studied and of how the research process should be conducted. They are the team's "outsiders". The users of the sun therapy rooms and the staff who were interviewed in focus groups can be said to play a supplementary insider role as "users". The insider/outsider (I/O) team was most active in the planning and evaluation phase, while the researchers conducted the focus group interviews. The conclusions reached and interpretation made by the researchers have been validated by the entire I/O team.

### ***Data collection***

Data collection took the form of two focus group interviews: one with the elderly people and the other with staff at three residential facilities for the elderly in Vänersborg Municipality. The particular strength of the focus group interview lies in the participants sharing their experiences with one another and having the opportunity to compare views and evaluations with one another (2-4). The results have been analysed using a content analysis method that involves identifying the (manifest and latent) meaning of the participants' experiences of using sun therapy rooms (5). For the elderly reduced use of tablet against depression with 40%. Among the staff, sickness absence numbers was reduced by 28%.

### ***Sample***

To participate, the elderly residents should have spent time in the sun therapy room regularly during the last six months and the staff should have experience of the sun therapy room for at least one year. Vänersborg Municipality was selected because it was the first municipality to offer sun therapy rooms to elderly residents and staff and consequently had the most experience of this activity. Representatives from the municipality also had an

interest in the activity being evaluated. The participants were selected by care managers with a good knowledge of the people who used the sun therapy rooms. The staff group comprised five women and one man aged 40-60 years (average 58 years) with two to 30 years' work experience (average 14 years). The group of elderly residents comprised four women and one man aged 78-94 years (average 87 years).

## ***Implementation***

An invitation was sent to the participants approximately one week before the interview. The interview started with the participants being informed verbally about the background to the study, its objective and method and the fact that the study material would be handled confidentially and that participation was voluntary. The consent form was completed and the elderly residents were told that they could discontinue their participation without this affecting their future care (6). One researcher and one research assistant from Närhälsan, FoU primärvård Fyrbodal, conducted the interviews, each of which lasted about one hour. During the interview, the main focus was how spending time in the sun therapy room affected factors relating to physical and mental health.

## **Findings**

The analysis of the two focus group interviews reveals that spending time in the sun therapy room affects the elderly residents' mental and physical health and that the actual period in the sun therapy room also performs an important social function.

## ***Theme 1. Is there an impact on the elderly residents' mental health?***

The elderly people stressed that spending time in the sun therapy room is good for both body and soul, not least for mental well-being. It is also described as important for mood: someone feeling low in spirits before the visit experiences a lift in mood and feels happier afterwards. The elderly residents compare sunbathing with taking a sauna. The warmth and light are said to be salutary, while the visit to the sun therapy room breaks up the monotony of the day.

### *Melts away worries and troubles*

“I think your worries melt away in the warmth and the warmth has a beneficial effect. You feel good, so to speak, and lose a little of what was worrying or troubling you. That’s how life is after all: there are ups and downs. Sometimes you’re up and sometimes you’re down. When you’re feeling down, it’s lovely to be able to go to the sun therapy room, because it always lifts your mood a bit.”

### *Alleviates low spirits and breaks through the melancholy*

“You go through different phases in your life. Sometimes you can’t cope with anything and don’t want to do anything. And there are many pensioners who easily become depressed when there isn’t much happening in their lives. It’s boring and miserable to have to sit on your own in your room all day long.”

*Helps you relax and increases your sense of well-being*

“I’d describe it as being a bit like having a sauna. Many people think going and having a sauna and then going and having a shower afterwards is wonderful. The overwhelming view is that it is wonderful and makes people feel good. Using the sun therapy room is similar, in that you get the same euphoric feeling.”

“It makes you feel really relaxed and well and, if you feel good mentally, then you feel good physically – the two go together. The sun therapy room makes you feel good! It’s something to do with the warmth and light that unquestionably makes you feel good.”

The staff group agreed that spending time in the sun therapy room alleviates the elderly people’s motor unease during the time they are in the room that they sleep well while in the room and that they seem more alert, look happier and are calmer and more relaxed afterwards.

“But what you notice most is that, if there is someone who is agitated in the unit and you take them down to the sun therapy room, you see what a difference it makes. If they are extremely agitated and wonder where they are, they’re better after visiting the sun therapy room.”

## ***Theme 2. Is there an impact on the elderly residents' physical health?***

The elderly people enjoy the warmth during their time in the sun therapy room. They also say that the warmth relieves various forms of chronic pain, both while they are in the sun therapy room and for a period afterwards.

### *The warmth relieves pain*

“Yes, I have to say I’m in an enormous amount of pain, so it’s wonderful to lie in the warmth. I have something they call neuralgia and it’s very difficult both to diagnose and to cure. But, when I’ve been lying in the warmth for a while, it feels nice for an afternoon or a few hours at least and, while you’re actually lying there, it’s absolutely lovely, so the pain is relieved by being in the sun therapy room.”

The staff say that the time spent in the sun therapy room has a noticeably positive effect on those individuals with joint problems and joint pain and on hyperkinesia (chorea) associated with Huntington’s disease.

“It depends on the type of pain it is. If it’s joints and things like that, I think they really benefit from it. It seems as though the warmth helps.”

### ***Theme 3. Does the sun therapy room perform a social and cognitive function?***

The elderly people find that a visit to the sun therapy room awakens pleasant memories of holidays and places they have been to, both abroad and in Sweden where they grew up. Spending time in the sun therapy room represents a break from the daily routines and is something they look forward to.

*The sun awakens memories*

“Yes, it makes you associate with pleasant memories from the past, from Italy, the Canary Islands and Tenerife and the usual tourist places in France and Spain.”

“Lying on smooth rocks on Sweden’s west coast on a summer’s day isn’t bad either. It’s nice there too, but of course it’s completely different further south, as well as being warmer.”

*Look forward to the next time*

“It’s lovely. Every time you leave the room, you’re thinking how nice it was and when can I come again.”

*The sun boosts the inclination to take part in other activities*

“Everything you do, like going to the sun therapy room, makes you feel a bit more inclined to give other things a try. It boosts your inclination to take part in other activities. You

go with the others and realise it was both good and enjoyable. And meeting people other than just the staff in the unit is good, I think. You get out and meet other people.”

The staff say that the elderly people appreciate getting out of the unit and that the change of environment makes them more alert and happier. Having the opportunity to sit with other people in the warmth stimulates the power of association in many of them and talking about their holiday memories with one another fosters a sense of fellowship among the elderly residents.

*Feel a sense of fellowship with others*

“When I mixed people from the home as a whole – both those with dementia and those with somatic problems – there was a lot of talking! I don’t think it’s just the sun and the warmth. It’s also the opportunity to meet and chat a bit and feel a sense of fellowship with others.”

*Spending time in the sun awakens the power of association*

“Some of those who have travelled start talking about it. Many of our residents started going on holiday in the late 1950s, when it was something new, so they really have something to talk about.”

# Function of the sun therapy room in everyday life

## **A. General**

### **The elderly residents**

Sunbathing is a popular activity that is enjoyed frequently by pensioners at the elderly care facilities involved in the study. The cost of visiting the sun therapy room is included in the rent and, in this respect, the elderly residents agree wholeheartedly that this should be prioritised in elderly care in times of financial cutbacks. Nevertheless, not everyone is aware that the sun therapy rooms exist; some are not considered capable of going there. Some are unable to manage it or do not dare to sunbathe for various reasons. For some people, visiting the sun therapy room is the only bright spot in their everyday life.

*Don't make sun therapy rooms a lower priority*

“The elderly care sector gets so little and, when cuts have to be made, it's things like this that those in charge decide to cut. But we think the sun therapy room is essential!”

*Not everyone dares*

“They don't believe it's as nice as it is or say they can't manage it. Some are a little afraid of the heat and think their hearts won't take it.”

## **The staff**

The staff also think that the sun therapy room is a popular activity. When the rooms first came into use, several people were doubtful about going there. Today, however, the sun therapy room is very much appreciated and is something the majority of residents both look forward to and spend time in regularly, not least the younger residents in short-term respite care.

### *Sun and warmth work like light therapy*

“It’s precisely the warmth that they need. They’re always sitting wrapped in blankets and what have you, so, when they come here and experience the warmth, it’s good for them. And it’s the same with the light: here in Sweden; it is dark for half the year, so this is almost like light therapy.”

### *Regular users think it is great at the time*

“We have some residents who have used the room regularly since we started in 2008. They don’t say so much about it now because it’s become a habit to go there and let their bodies relax. But they think it’s fantastic at the time.”

The staff highlight the importance of the location of the sun therapy room within the residential facility and emphasise that accessibility determines the extent to which the room is used. At one of the care homes, it is currently difficult to get time in the sun therapy room because there are so many people who have to share. At other homes, the room is not used as frequently because

of its remote location. Family members are also welcome to sunbathe.

The staff think that all accommodation for the elderly should have a sun therapy room.

*The location of the sun therapy room in the building determines how it is used*

“I don’t know how they are used at Ekeliden, Lyckhem and Björken, but at Lyckhem it’s hardly used at all, so it depends a little on your previous experience. Here, it’s close at hand because it’s right here. At Lyckhem, you have to go down into the basement, same as Ekeliden, and perhaps then it’s not so attractive. So it seems to make a difference how it is set up, for both the residents and the staff.”

## ***B. Before a visit to the sun therapy room***

### **The elderly residents**

For the elderly residents, it is important to be able to sunbathe regularly and, for some, at least twice a week. Some manage by themselves; others need help to book a time and start the equipment. They think it is good that each unit has specific days for using the sun therapy room. It is also good that there are some staff at the unit who remind residents about their booking and who ensure that visits take place. Some sunbathe when they have the chance and others when their condition allows.

*Good to have a set day and someone to co-ordinate things*

“I think it would be good if there was one day a week when you were booked to use the sun therapy room, so those of us in the unit where I live could decide when we wanted to go down to the sun therapy room and have that day for a period into the future. Knowing in advance and having it planned are good. NN takes care of this; she makes sure we go down and that it happens. That’s good.”

## **The staff**

The staff prepare for the visit to the sun therapy room in different ways. When they tell the elderly people that it’s “sun day”, some talk about the day’s destination and about the journey they are going on. Everyone makes their way to the sun therapy room together, with everyone helping one another, which creates a sense of fellowship before, during and after the time spent in the sun therapy room.

*We tell the residents in the morning*

“We usually mention it in the morning and remind them that today we’re going to the sun therapy room. Some are really pleased! When we tell one lady, who usually stays in bed sleeping, that today is the day we go to the sun therapy room, she says, ‘Oh, I like that!’. Then there is no problem: she gets up by herself and gets ready.”

*Everyone helps one another in the “sun procession”: the more able help the less able*

“It’s so funny to see them like a procession, 12 people one after another. Those who can walk help to push those in wheelchairs. I think something happens as we start moving along the corridor. There’s a sense of being on the way somewhere and there is more fellowship, chatting and cohesion. When we’ve finished, they look after one another in a similar way, so those who are less able wait for the people who are more able and it all works out very well. The walk is tiring for some of them.”

### ***C. During the time in the sun therapy room***

#### **The elderly residents**

The elderly people say that the time spent in the sun therapy room varies between 40 minutes and an hour. It depends how long they can manage. During the time in the sun therapy room, they appreciate the calm, the quiet and lack of interruptions – just the sound of the waves – and they experience a deep sense of relaxation while there. The visit is rounded off by Harry Belafonte.

*Calm, quiet and pleasant, with no one interrupting*

“It’s really relaxing and enjoyable and I think it’s nice because it’s usually quiet in there. No one talks and no one interrupts; you can sit and enjoy the sun and daydream if you want to. You don’t go to sleep, but you relax and just listen to the sound of the waves and the gulls in the distance and the lapping of the waves. And when it’s over, the sun sets and Harry Belafonte starts singing *Island in the Sun* and then we go home.”

## **The staff**

The staff say that a visit to the sun therapy room lasts a total of one hour, including outward and return journeys. They report that some of the elderly residents perceive the journey as real.

*The trip is an hour in total*

“We have an hour to get there and back, including transport and so on. It takes an hour to get through the corridors when there are so many with us.”

*Some perceive the journey to the sun as real*

“When we say to one of our elderly residents that she’s going down to the sun therapy room, she has to have her sunhat with her because she can’t sit in the sun too much with strong sunlight in her eyes. The first time I laughed so much because we were sitting there and I said that she could lean back and relax a little. ‘Are we there, then?’ she asked. I said we were and she said it was the strangest flight she’d ever been on, as she hadn’t even boarded the plane. She really believed she was on holiday.”

## ***D. After a visit to the sun therapy room***

### **The elderly residents and the staff**

Both groups say that they feel both tired and thirsty after a visit to the sun therapy room. Some of the staff feel like a new person,

their mood is improved and they are more patient with both the residents and their colleagues. The sense of fellowship and happiness experienced before, during and after the journey is often still there when they return to the unit.

### *Tired and thirsty afterwards*

“You feel tired afterwards, I think. You get thirsty too and need a drink. We have sparkling water in a nice glass. It looks a bit more special than the ordinary drinking glasses. At the start, we used to get a little umbrella in a tall glass, but now it’s changed to more everyday glasses. And if you want more water to drink, you can have it.”

### *The sun is followed by thirst and happiness*

“And they get a little thirsty afterwards, which is actually good, because they’re not so good at drinking otherwise. It’s really good to have ‘drinks’ afterwards, once we’re back in the unit. It’s another form of fellowship and, when they come back, you can sense there’s a little more happiness in the unit.”

### *Share their experiences of the trip*

“Yes, they’re actually a little more alert. They always sit together in the TV room when they come back from the sun therapy room to have a drink of squash. When I ask where they’ve been, it’s funny because they tell me they’ve been

to Mauritius, Miami or Bali or somewhere like that. We always ask them, because they can choose the sunny place they want to travel to. We usually give them three options.”

## **Discussion**

A good atmosphere was created in the focus groups and all the participants contributed. Among the group of pensioners, one of the participants described her experiences more readily than the others, which helped the group to explore the subject in greater depth than would otherwise have been possible. The person in question had been the chairperson of a national trade union for many years.

The study shows that both the elderly residents and the staff are very positive about the time spent in the sun therapy rooms. It is a relatively inexpensive activity, accessible to the vast majority and used by many. In common with other activities offered at residential facilities for the elderly, the sun therapy rooms perform an important social function, with the elderly residents coming from their units and having a chance to meet other people. The findings are of so much interest that the sun therapy rooms and their impact on the elderly residents should be studied in more detail.

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