

REPORT:

Clinical Study on

Wearable Very Low Power – Pulsed Electro Magnetic Fields (VLP PEMF)

For patients with Main Diagnose – Depression,

In a clinical setting of a Mental HealthCare Institute (GGZ) in The Netherlands.

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**Initiative:**

The initiative to the study was taken by the Mental Healthcare Institute (GGZ) Cirya in The Netherlands, in order to investigate whether Pulsed Electro Magnetic Fields (PEMF) could be of help in treatment of clients with main diagnose Depression. HollandCare as a R&D company on Bio-Resonance, was selected as partner for this study.

**PEMF studies:**

A lot of studies on VLP PEMF-systems have been done and published. The one thing they all have in common is no unwanted side-effects are reported.

Furthermore the aimed results were not always met or not at the wanted level. At the same time, many studies reported very acceptable results and suggest more investigation. The Golden Rule is, the better there can be focused on a specific issue with a known biophysical cause and /or solution, the better the results can be.

**Study Positioning.**

Although this VLP PEMF-study is not a study on medicine or medical equipment, it fully complies with the rules of "Good Clinical Practice". This also gives that the results are validated and of high professional quality.

**Project responsibilities.**

The two main activities in the project were strictly separated between the GGZ and HollandCare. The planning, organizing and executing of the project itself, was the responsibility of the GGZ-staff. This included the selection of the participants, the daily contacts, the administration of the weekly wellbeing-lists as well as collection of the results before it was incorporated in the project-documentation.

The coordination with respect to the used VLP PEMF-equipment, and adding the collected study-results into the project-documentation, as well as adding the other information to the project-documentation, was the responsibility of HollandCare.

**Project documentation owners are Cirya-GGZ and HollandCare together.**

**General:**

The study was structured as a Random Double blind Placebo controlled protocol. Two versions of the same VLP PEMF-unit were involved. One version was a full functional unit, the other version was a Dummy-unit with exactly the same behavior as the full-functional one. 20 units were available for the study (over a study-period of 2.5 years). All units had a serial number which were randomly spread over the different unit-types. Nobody involved in the study was able to distinguish the two versions of units. The participants were told they could have an active or an inactive unit, but neither the staff or the participants were able to know or influence this.

**Participation conditions:**

Participation was without any compensation or reward. The only commitment needed was to use and keep registration of the VLP PEMF-unit usage as indicated, on a 3-times per day schedule and give a weekly indication of wellbeing, during 6 weeks in a row. It was allowed to stop participation at any moment without the obligation of giving a reason, although this would be appreciated. Participation was completely anonymous. No to a person retraceable information anywhere.

**Participant selection:**

Participants were selected from the GGZ-waiting-list and had as less as possible active treatment yet. The first selection criterion was on the main diagnose Depression with as a second selection on no usage of antidepressation medicine. Furthermore the goal was to have equal selection on man/woman.

**During the intake and diagnose for the waiting-list, potential participants were asked if they would like to participate in the study at the actual conditions (as above). If they agreed they were further introduced.**

**The selected wearable VLP PEMF-unit for the GGZ study is the QX-G which is a product designed, produced and supplied by Klaus Gruppenbacher Consulting in Germany. The basics of the QXG platform has already been tested for more than 15 years with broad specifications and with 3 different program-versions. For the study the unit is used on a cord around the neck, but it can be placed on other parts of the body also.**

**It is based on bio-resonance. This is a method in which individual resonance frequencies (or sub-harmonics) of, for example Red blood cells or specific endocrine glands, are formed together in a special composition, in order to cause a specific biological (and together with that, sometimes a Psychological)/mental) reaction.**

**In case of the QXG it has several general stimulations to enhance physical health, but also a specific one (very mild) on Endorphins. Although the name might expect a certain degree of possible addiction, this certainly is not the case. It has to do with wrong name-giving in the early days of determination and analysis of it.**

**This non-addiction effect is also the reason for selection in the study. It is safe, has no unwanted side effects and can be stopped any time. This can be the case if the mind-body starts with taking over again.**

The QX-G is a small and handy device for Bio-resonance. It produces ultra-weak electromagnetic signals that have a beneficial effect on the feeling of well-being. Thus, it improves mood in general. Initially, this is a temporary improvement. However, with repeated use, it will contribute to increasingly lasting change. The QX-G has been extensively tested in recent years, mainly in Germany but also, on a smaller scale, in The Netherlands, with very good results. The QX-G is in no way harmful to physical or mental health and can only contribute to its improvement.

When to use the QX-G? It is recommended to use the QX-G at least 3 times a day (it can also be used more often) for six weeks (during the GGZ-pilot). That is at about 09:00 in the morning, around 13:00 in the early afternoon and around 19:00 in the evening. These are "approximately" times that can deviate by about an hour, but at least three times a day. If from the sixth week, the QXG is still in use, one can vary as needed. Throughout the day, there can be several moments people are in a bad mood. The cause of this can be very different, but is not distinctive for use. Simply turning on the QXG and wearing it on the body (with the lights facing the body) is sufficient. The operation lasts about an hour and ends with a few soft beeps after which the device switches itself off. The effect is usually not immediately noticeable. It also works gradually. Usually it is only afterwards that one realizes that one has started to feel better or less bad, so gradually it goes better. Such a moment of feeling bad or not feeling good anymore can arise throughout the day and the QXG can then be used, also several times a day. When used for the first time, it may take a while before any results are noticed. This is very different per person and may take a few hours to even a day. Over time (also different for everyone) people slowly start to notice that they need the QXG less often and therefore use it less. This is normal and indicates that the improvement is on its way to becoming more permanent and under its own control again, as it normally is.

**Operating the QX-G.** With the lights on the top and facing your body, the control button is on the left side, at the level of the lights. The on-off button is placed on the left side of the device, allowing it to be operated with the fingertip or nail. A slight pressure is enough to switch on the device. The QXG will emit 3 short beeps and a few small red LED lights will illuminate. Occasionally, one of the lights will flash, that's normal. The device is now in operation and can be worn on the body. After about an hour, it will turn off on its own. If you want to switch off the QX-G earlier, press and the button for a few seconds and the QX-G is switched off.

The battery has enough power for about 5 days, depending on usage. It is recommended to charge the QXG at least every three days. At night (but also during the day) it can be charged with the included charger. If the battery is completely depleted, the red light will immediately turn off again (or not on at all) when switched on and must be recharged first. After half an hour, the QXG can be used again and then fully charged overnight. The charging cable with micro-USB plug must be inserted into the QXG with the two small protruding points towards the front of the device. If the QXG is equipped with a magnetic USB, simply hold the plug over the connector and it will click-in. When the QXG is fully charged, the red charging light will be off.

Progress:

The preparation and implementation of the project was not easy. At first COVID-19 came by and secondly it was heavily underestimated what operational issues would arise in preparing a solid performing regular Mental-Healthcare organization, for the relative “complementary” set-up of this study

This is where two worlds meet and have to get used to each other before the process of understanding each other can start. We therefore owe many thanks to the staff of Cirya GGZ who showed much flexibility and understanding without changing their professional values and work-procedures.

The fact that the study itself took such a long period of time (2.5 years in total), was mainly caused by the very strict participant-selection to make it possible to deliver high value and standard of information to form a solid base for analysis and conclusions. The relatively restricted number of participants also made a strong selection an absolute necessity.

While the selection from the waiting-list of the GGZ showed a lot of people already had a specific medicine prescription history and therefore could not be selected as a participant, we also found a way to select and study on some participants who were a bit earlier in the Healthcare treatment and without using any relevant medicine. With complaints like extreme tiredness and/or a serious lack of energy. They also underwent the same selection criteria as the others.

Results:

In General.

All participants with an active unit had a positive to very-positive response.

All participants with a dummy unit had no positive response.

More specific.

75% of the active unit users had an average increase of wellbeing-score of 10% over 6 weeks without any GGZ-treatment, even with skipping the best and worst results.

More study related information.

First reaction we had, brought a direct feed-back and was a clear signal for a more detailed introduction of VLP PEMF to the study participants. It is known that some more sensitive people may feel a certain awareness of VLP PEMF-fields. Some people see it as a proof it works. In the study, two participants had this experience. Maybe their diagnose should have been an indication of possible higher sensitivity, but this possible effect was not mentioned during the first introduction at that time. However, in principle this effect may be seen as a positive response.

One participant became a bit worried and decided to stop participation in the study. After the study it appeared that it was a "working" unit so the experience was "real". No more details to investigate were available.

One participant stopped after two weeks, because there was felt a certain "resistance". After the study it appeared to be a dummy-unit. This might be an indication of a Nocebo reaction but was not further investigated.

In the group participants with a working unit, there were some people with a very positive response. It was not tested whether they were in the group with absolutely no active medication usage. Also this could have been the case. In general we expect a lower response at people with intensive medication usage because of the flattening affect on emotions.

The duration of a single participation was 6 weeks. It was not tested whether results became better with longer usage or different frequent usage. Furthermore we could not investigate whether the few participants who already used antidepressives, had less positive results although we expect it will to a certain degree..

## Chapter 6. Summary and Conclusions.

### Summary:

It was a long and bumpy road to get this study done. Main reason was the fact it was a clinical study of a complementary application, in a regular medical institute setting and working conditions.

It, however, was very successful, with very positive results and supplied valuable information. It showed this specific equipment can be of help with very common mental issues which have a growing negative influence in business- and private-life. It also may be of help in professional mental health treatment protocols, but for that area needs more specific studies.

### Conclusion:

VLP PEMF, if well-tuned to a specific application, can very well be beneficial in daily life. It is not like taking a pill. Because of it's gentle approach it needs a certain degree of discipline in use. This, however, is very easy with wearable equipment that can be small and even may look like an ornament.

There are no unwanted side-effects and there is no risk for addiction. There still is a lot to discover for other specific applications but it certainly is worthwhile this effort.

The study shows there is a lot to save and earn. At the workspace and in private life.

Since your Health is your Wealth, It could be seen as "Personal WHealthCare".

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