

ANALYSIS OF TECHNICAL DEVICES FOR PROTECTION AGAINST ELECTROMAGNETIC RADIATION

**Stoyan Velkoski¹, Georgi Kotevski¹, Frank Otten²,
Gordana Zlateva-Velkoska³, Jadranka Denkova⁴**

¹*Institute "GAPE" – Skopje, R. Macedonia;*

²*Laatzen, Germany*

³*Clinical Centre, Skopje*

⁴*Crises Management Center GOV RM, Skopje*

e-mail: contact@igape.edu.mk; www.igape.edu.mk

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Abstract. *Sources of electromagnetic radiation can be divided into two groups:*

a) Natural sources

b) Artificial (technical) sources

Natural sources of radiation include: solar storms, cosmic rays (Kerrew's net, Hartmann's net, Stojan's net and Stojan's cosmic groups), geopathogenic underground radiation sources, ionization, bio-architecture and other radiations that can be evoked in a natural way.

Artificial sources of radiation consist of transmitters in mobile and relay telephony, radar systems and other electric and technical appliances and instruments used in everyday activities.

The electromagnetic radiations have a powerfully expressed depolarizing power over the cell membrane. The result is a disturbed intercellular collaboration, which can cause severe and heavy diseases.

Ever since the man has discovered the harmfulness of electromagnetic radiation, he contemplated how to protect himself.

Various instruments and devices well advertised emerged on the market, most of them with only a softening effect or reflective, but did not protect.

Some of the solutions have been reached as a result of the very form or the composition, e.g. filled up with quartz sand or similar crystals, which in short term can have positive effect on the space, but then become neutral or even represent sort of transmitters of damaging effect on space, like the biopyramide PXD and other similar to them. With instruments and devices like this, people are manipulated, and that is why they are interesting in technical, psychology, low, economic and other analyses.

Today there is only one well-known solution worldwide - Neutralizer-Transformer BIO-SPH, which in addition to the softening effect on the space, has a neutralizing effect, which by means of conversion reduces the radiation intensity and disables the depolarizing power on the cell.

Introduction

Since the human being has become aware of the harmfulness of the electro-magnetic radiations many technical solutions have been explored for protection against them. Different methods have been used, as for example: following the animals' instinct, the decaying of animal tissue etc. In spite of such analyses the human being has started to detect them by means of traditional appliances and instruments. This type of detection with traditional instruments is named radiesthesia. Radiesthesia, as a scientific branch, belongs to geo-biology and represents the base of contemporary detection.

The detection brought about the use of protective measures, such as straw, tar, oils, plastic foils, metal sheets, spirals etc. Different devices have been used for protection against electro-magnetic radiations, especially during the eightieth years of the 20th century. They can be divided into three groups according to their meaning and function: beneficial, reflective and neutralizing-transforming.

Beneficial: The beneficial means are as follows: shapes, colors, materials, light, sound, smell etc. In this group the shapes of Cheops pyramid are often used but they are also misused in the most cases. The influence of the Cheops pyramidal shape against the electro-magnetic radiations in the environment has not been scientifically or technically demonstrated until now. The measures of its efficiency are only empirical. From this aspect the Cheops pyramids are misused in the following ways:

- Nonfunctional elements and forms which, supposedly, create some positive "miracle" and influence on the human health are placed within the pyramid;

- Sand is placed in the Cheops pyramidal forms and one side of the pyramid is marked. The manual instructions say that the marked side must be placed to the north, which leaves certain psychological effect on the consumer;

- The contemporary pyramidal forms which are, unfortunately, presented on the market represent a combination of the above mentioned two types. Among the others, the PXD bio-pyramid belongs to this groups.

Reflective: This type of measures, intended for protection against electro-magnetic radiations include different spirals, foils, printed plates, metal sheets, nets etc.

This type of reflective protective measures have the possibility to reflect and to dislocate a particular frequency of radiation laterally from the protective device. The "Biosaner" is one type of such measures which represent a circuit printed in the shape of a four-leaf clover. The results are accessible by empirical methods and by using the technical measuring instruments.

Neutralizing-transforming: This type of measures have the capacity to neutralize and to transform the electro-magnetic radiations, thereby changing the radiation intensity, especially of those up to 300 MHz. The natural electro-magnetic radiations are included in this scope.

We can mention the following appliances from this group: Ray master and neutralizer-transformer BIO-SPH where the functions of the appliance have been technically and clinically verified. The influences of the above mentioned technical solutions also have the first group (beneficial) characteristics besides the influences of the devices belonging to this group. Besides with empirical measuring instruments, the results can be achieved with technical measuring instruments as well.

Purpose of Exploring

The purpose of this exploring are the frequent public advertisements of pyramids intended for protection against electro-magnetic radiations where many people from different structures in our society are included.

There are variable models of sale, one of which is the multilevel system. These circumstances have spread fear and panic among people, especially in the Republic of Macedonia, where this propaganda is the most intensive, as opposed to the ignorant public policy which is obliged to protect the people.

The advertisement says that the product protects the people from long-distance power lines, high-voltage power stations, transmitters, computers, cosmic, geo-pathogenic and almost all other radiations. These statements go so far as to say that these radiations kill the people and the unique way of protection is the offered product.

In this respect, different appliances are offered to people. The real value of the offered products is 1–5 Euro but their market price is 120 Euro and more. These circumstances reduce the home budget while the people are indirectly exposed to dangers.

In the present time one of the most prominent case of this type is the actual product, the bio-pyramid PXD. According to the advertisement, this product, supposedly, protects the people and represents the unique world "miracle".

In the beginning, it was said that the product possessed an inside chip constructed by Nikola Tesla, but after the public refutation they immediately stopped this thesis because they did not have an adequate answer to the reactions of the people. After that they took some German Certificate about the same product with supposed confirmation of its efficiency and its capacity to protect from electro-magnetic radiations.

Materials and Methods

Many different known protective devices, which are used for protection against electro-magnetic radiation, have been analyzed, and a special accent was given to the bio-pyramid PXD (Fig. 1). In the beginning, this type of pyramid was named IDRA, but since a year ago it has been named as PXD. It has the pyramidal shape of the Cheops pyramid with two pieces of porcelain cast. The upper part is 2/3 from the base surface.

The accuracy and the efficiency of the protective device have been analyzed.



Fig. 1.

Different methods, technical and traditional, have been used during the analyses. The great range of frequencies and sources of radiation have been taken into consideration according to the product

advertisements. Recently, the product has received a Certificate, which is publicly presented as Functional Certificate issued by the International Electric-Smog Institute from Germany.

The advertisement of this device goes so far as to claim that its efficiency and capacity of protection from electro-magnetic radiation enable the accumulation of radiation inside of the pyramid from the area of 153 m². The upper cap of the pyramid should be opened after 3–4 months and the accumulated radiation should be ventilated through an open window.

Unfortunately, a great number of people do not take into consideration the real characteristics and the function of the PXD pyramid. People think that after purchasing the PXD pyramid, they have solved all the problems they had with electro-magnetic radiations (even in the case of high-voltage power transmitters which were passing above the customer's buildings).

For that purpose, complete functional analyses of PXD pyramid have been made upon the demand of several users of PXD.

Analyses from the received German Certificate have been included during the exploration, verifying the product's function described in the advertisement.

The analyses are divided in two phases: Analysis I and Analysis II.

ANALYSIS 1: The pyramidal shape of the Cheops pyramid with title of PXD bio-pyramid has been analyzed. The pyramid dimensions are 11.5 x 11.5 x 7.5 cm, and it is made of ceramic. The above part is a separate cap and together with the other part makes out the Cheops pyramid shape. The rectangular porcelain piece with dimensions 31 x 31 x 39 mm is located inside of the pyramid. It is filled with fine sand mixed with jackal, quartz and other materials. Paper is glued on the opening, on which there is a round and engraved metal shape with dimensions 22 x 0,5 mm or the so-called chip located at 2/3 from the base and the upper part of the cap of the pyramid. The same is without any serial number or warranty.

This product is publicly advertised as intended for protection against electro-magnetic radiation. According to the product function, the same belongs in the field of physics and should be accessible for technical and measurable perception.

As there is no technical analysis of the product's function, made from any authorized institution, we have carried out some analyses with disposable means and methods.

Technical measuring devices used for analysis:

- BBM AC Magnetometer
- FGM 4 Magnetometer
- FGM 3 Magnetometer
- Multi-detector
- Three-field meter
- Tesla-meter
- Spectran H.F. 6060
- Divining instruments and devices

ANALYSIS 2: It is said in the constant public advertisements that the bio-pyramid PXD is attested by the IGEF INSTITUTE from Germany as satisfying all the functional criteria.

In connection with the German Certificate, a representative of the Institute - issuer of the Certificate IGEF, Mr. Paul Sommer confirms the following: that the bio-pyramid PXD has in no way been tested for reduction of radiation, but the analysis has been made with the biofeedback method (Fig. 2) where 22 volunteers were tested. After the examination was performed with the PXD pyramid, 30 % of the volunteers did feel some change when presented with the PXD pyramid.

"We did not permit the advertising of the bio-pyramid for protection against the radiation, but only for its positive influence to the people".

"We are not an Institute, but an Association which is evident from our web-site www.electrosmog.com".



Fig. 2.

What does biofeedback mean?

"Biofeedback is a process of learning to control the individual's own psycho-physiological functions by means of feedback information which is received through a certain electronic technology. This is a process of learning certain mind-body skills. Learning to recognize and to change the physiological responses is something similar to learning bike riding, playing tennis or piano, which necessitates practice. With practice, we become aware of our own psycho-physiological models of stress reaction and we learn how to control them. We can learn, without much effort, how to correct our own blood circulation, to change the breathing rhythm, the blood pressure, the muscle stress, the mental condition, to improve our concentration or achieve relaxation. We can practice our brain by neuro-feedback training to "produce" certain cerebral waves and to obtain some desired brain condition. Learning to self-control the physiological functions has considerable influence over health. The learned skills become automatic and after the training they are practiced independently from the therapist. The self-control of the physiological functions relieves the individual from medicaments in the most cases. There are no registered negative effects." (Extract from the Association web-side intended for biofeedback from Republic of Serbia <http://www.biofidbek.com/>).

Results

Results of Analysis 1: The bio-pyramid PXD is a two-piece pyramid, made of porcelain. The rectangular porcelain piece is located inside the pyramid (described above) and filled with river sand. A labyrinth is engraved at the upper side of the rectangular piece, a copy of which can be seen on page 268 in the book "Medicine of Living" by the author Jacques Lamaya printed in "New Yugoslavia"- Vranje published in 1989 in Belgrade, SFRY (Fig. 3).

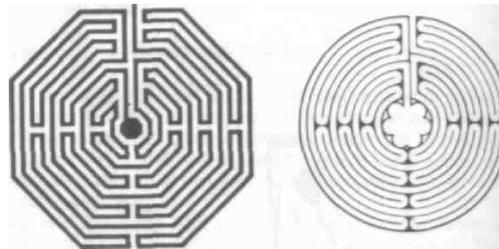


Fig. 3.

This labyrinth is presented as "bio G chip" invention of highest technology. The PXD pyramid is tested according to the recommendations referring to its correct functioning. The bio-pyramid had been exposed to sunlight with its upper cap open. During the testing the marked side of the bio-pyramid was always turned to the north.

The analyses of the above mentioned form were as follows:

- We have located the measuring device at 40 cm in front of the computer's monitor (CRT). The obtained intensity was 4 mG. Immediately afterwards the bio-pyramid PXD was placed between the measuring device and the monitor. **The subsequent measurements did not register any change of the field intensity.**

- We have registered the magnetic field of 5.5 mG in front of the same monitor at 20 cm without the PXD bio-pyramid. The same measurement has been repeated with the PXD bio-pyramid located at 20 cm in front of the monitor immediately below the measuring device. After 5 minutes the obtained results were 5,5 mG, **meaning that we have not registered any change.**

- We have measured the electricity component of 2 kV/m, at 20 cm in front of the same monitor without the bio-pyramid PXD. The subsequent measurement was carried out with a bio-pyramid located at 20 cm distance in front of the same monitor and parallel with the measuring device. **The subsequent measurements did not register any changing of the radiation intensity.**

- We have measured the electricity field in the amount of 15 kV/m in the vicinity of the high-voltage power transmitters in the settlement of Pintija. The PXD bio-pyramid was located near the measuring device at the distance of 1 m. The control measurement, performed 5 minutes after the placement of the PXD bio-pyramid **did not register any changing.**

- We have measured the geo-pathogenic field which was 80 cm wide and has been detected on the Dimce Mircev Street. The measurements were carried out by means of technical measuring devices in the presence of $E = 0,05$ kV/m and a magnetic field of $B = 0.04$ mG. The measurements were also performed with empirical (traditional) devices. The subsequent control measurements were made after 5 minutes, after the PXD bio-pyramid was located in the immediate vicinity. The results obtained by the technical measuring instruments **did not register any changing of the field.** The measurements were carried out at different distances of 1, 2, 3 and 5 m between the PXD pyramid and the measuring device, respectively. The

measurements performed with the empirical methods and with empirical instruments have shown results up to 37 cm around the bio-pyramid PXD.

- The same measurements are carried out with (k), (h) and (s) cosmic knots. The subsequent measurements have shown the same condition as with the gpr, meaning that the results were obtained only by the empirical methods at the approximate distance of 37 cm from the bio-pyramid PXD.

- The same measurements were performed with empty plastic and paper shapes of the Cheops pyramids. The compared results have been almost identical to those obtained with the PXD bio-pyramid.

- The PXD bio-pyramid specimens have been sent to different authorized institutions for examination. The Bulgarian Academy of Sciences in Sofia has made one examination, but the results were also negative.

All the measurements carried out so far have not registered any reduction of the electro-magnetic radiation which has always been the main purpose for their public advertising.

RESULTS OF ANALYSIS 2. The Certificate was issued by the German Association IGEF and dated 22.03.2007. The term "association" indicates an association of citizens but not an Institute, as this institution was named by the public proclamations.

The examinations were carried out with the feedback method, shown on Fig. 2, on 22 volunteers, which does not represent a relevant number for a serious scientific elaboration.

In accordance with the above mentioned we can conclude the following:

The human body reacts to different external and internal influences (stresses).

External influences: besides the mechanical influences, sound, light, humidity, temperature, wind, color, interior shape, radiation etc. can be considered as external influences.

Internal influences: these influences refer to inner negative stimuli and include the following: stress, nervousness, anxiety, thoughts, suggestions, speech, health condition etc. Also, we can conclude that the feedback examinations of the PXD bio-pyramid are not scientifically proved. We can expect results from these examination only on persons prone to suggestion, which was noticed in this case.

The human body can emit impulses, as is the changing of the pulse as a reaction to any of the above mentioned influence.

The Certificate issued by the Association, relying only on the bio-feedback method, can be treated only as a psychological effect to certain number of people based on their suggestible nature, but not as a technical or clinical attest, as was publicly advertised. This type of product needs scientific analyses and opinions, certificates or attests issued by authorized scientific institutions. The international scientific publications are needed in case of an invention.

The results of the study must include physical parameters, demonstrating which frequencies are reduced by the device and what happens with the living beings without the presence of any placebo effects. So far, the most relevant protective devices against the electro-magnetic radiation, which have been clinically and technically attested are the Neutralizer-transformers BIO-SPH (Fig. 4, Fig. 5, Fig. 6). A part of the expertise's can be seen on web site: www.soncevzrak.com. The function of the product, which is advertised as protective against radiation, can be justified only by this kind of arguments.

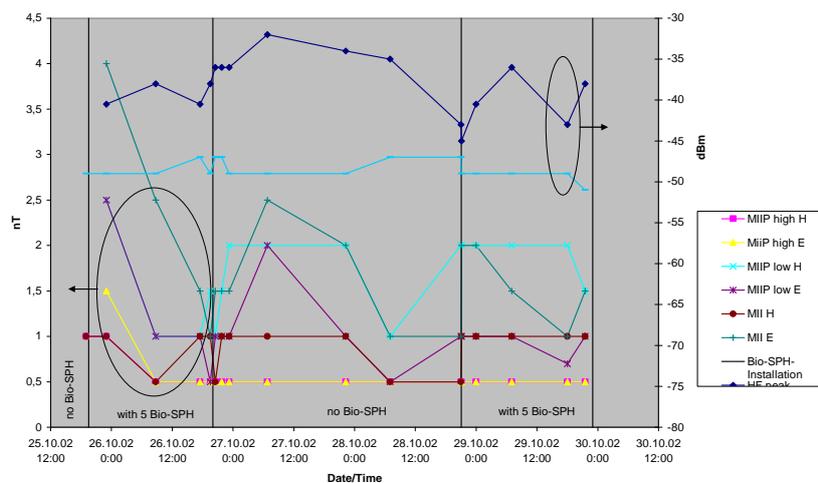


Fig. 4.

Electric radiation between 0Hz and 400 kHz

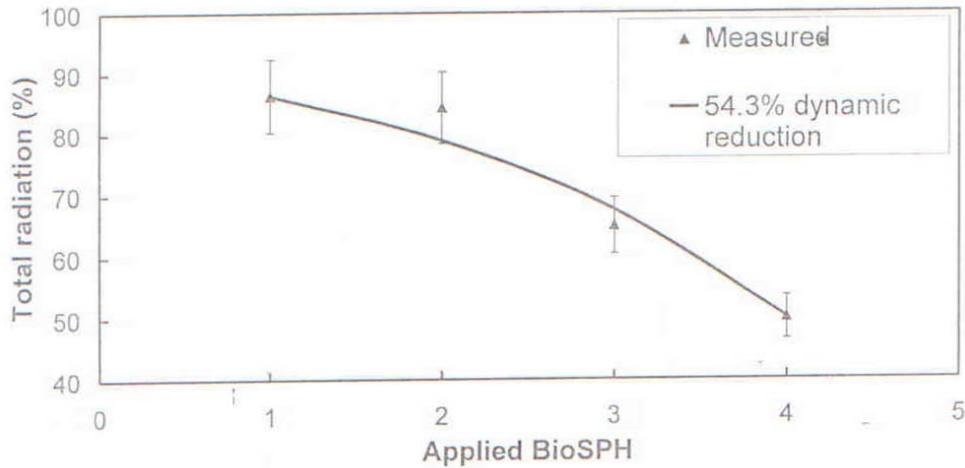


Fig. 5.

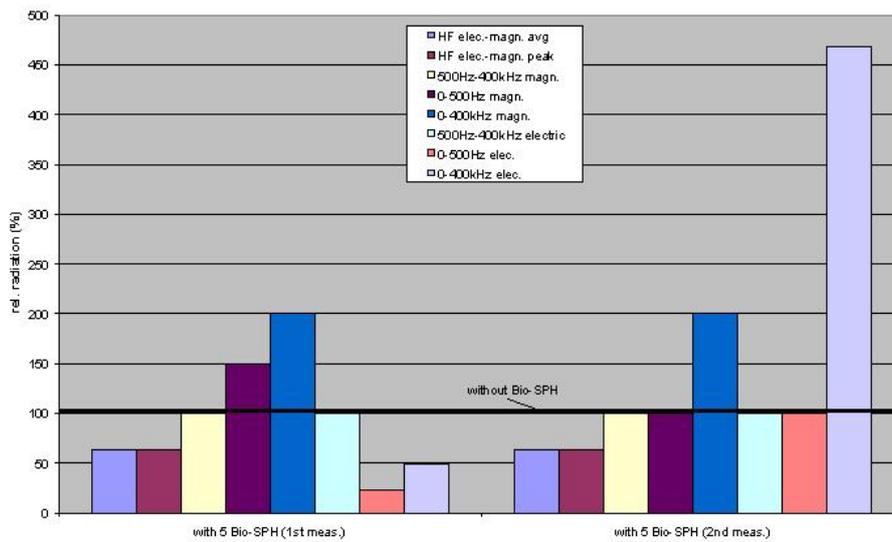


Fig. 6.

Discussion

“The radiation kills, the bio-pyramid PXD can save you, as this product has been attested at the International German Institution for electro-smog”. The above mentioned words are the most frequently used ones in the public advertisements.

How do the people feel, listening to this text, daily advertised by renowned reporters, doctors etc.?

It was confirmed that during the analysis, the examinations were not made by an Institute but by an Association of citizens, which represents a legal entity smaller than a company.

The examination was carried out on the basis of bio-feedback i.e. on psychological effect on 22 volunteers. Scientifically, this Certificate is not a technical solution, but an analysis of the psychological effect on small group of people.

The measurements were performed in such a way that the subjective influence was presented to a considerable level.

The representatives of the IGEF Association themselves said that the examinations were made on the base of a psychological effect, but not pursuant to any technical attest.

Now the product is advertised every day, making the psychological pressure to the people purchasing in panic the "pyramid-savior" although the price of this type of pyramid is approximate to their monthly salary.

Conclusion

On the base of the analyses carried out on the functionality of the PXD bio-pyramid against the electro-magnetic radiations, with an unlimited shelf-life, we can conclude that the same product does not fulfill the functions presented in the catalogue and through the public advertisements.

The mentioned bio-pyramid PXD can be treated only as a Cheops shape with certain positive effects but the same can not prevent the radiations from technical and other electro-magnetic sources.

The PXD bio-pyramid is porcelain-cast. The rectangular porcelain piece is located inside the pyramid filled with fine river sand. An engraved nickel-coated piece of metal sheet is placed at the opening of the rectangular sand-filled shape.

The following is necessary in order to advertise some product intended for protection against the electro-magnetic radiations: the measurements against the electro-magnetic radiation should be performed by the authorized institutions, and by technically educated individuals. In case of an innovation, the measurements should be carried out by a Ph.D. expert in this field, supported by numerous scientific elaborations, physical and technical attests, with defined frequency of reaction, and all the above mentioned should be confirmed with technical measuring instruments. The non-fulfillment of these requirements implies violation of the law.

In this case two tilted pieces of string, which are not considered as scientific technical support, are used to prove the product's functionality.

In this case, there is every right to say that it represents a complex and a serious violation which is interesting for various aspects of analysis, such as: for scientific-technical, legal, economical, psychological and others.

References:

1. F a r k a s B. New Radiesthesia, Zagreb, 1988.
2. L a m a y a J. "Medicine of Living". Belgrade, 1989.
3. F a r k a s B. "Radiesthesia in practice", Zagreb, 1990;
4. M a r d i r o s s i a n G. "Natural Ecocatastrophes and Aerospace Techniques and Instrumentation for their Study", Sofia, 2000, 384 p.
5. D e l i p e t r o v T. "Bases of geophysics", Stip, 2003.
6. V e l k o s k i S. "Distanciona aerokosmichka i nadzemna istrajivawa dejstva elektromagnetnih zrachewa na zivotnu sredinu", Tivat, 2004.
7. V e l k o s k i S., G. K o t e v s k i, G. Z l a t e v a – V e l k o s k a, G. M a r d i r o s s i a n. "Effect of the electromagnetic radiation on the cell function and protection with BIO-SPH. SENS 2005, Varna 2005.
8. V e l k o s k i S. "Discovering and working on the harmfulness cosmic knots of the new discovered S2-net SENS2006, Varna 2006.