

Influence of Faradarmani Consciousness Field on Bacterial Population Growth

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ABSTRACT

The treatment of bacterial infections and the rising challenges of antibiotics resistance are global concerns and the primary topics in basic science and clinical microbiology. In the present study, the effects of treatment of selected populations of bacteria using an immaterial and non-energetic method called Faradarmani Consciousness Field (FCF) treatment are investigated. Population growth was assessed by turbidimetry, colony counting, and tetrazolium chloride reduction assays in non-treated control and Faradarmani-treated groups. Our results suggest the effect of the Faradarmani CF on reducing various types of bacterial strain growth rates (up to 46%). In addition, along with a decrease in the bacterial population, evidence of increased survival can be seen in the larger healthy population (up to about 60%). In this experiment, we confirm the effects of the Faradarmani CF on the bacterial growth population and their survival. These results suggest Faradarmani CF as a qualitative treatment and this evidence paves the way for further investigation on TCFs. This study also warrants additional research.

Keywords: Faradarmani; Taheri Consciousness Fields; laboratory bacteria; nosocomial bacteria; population decline; survival assay

INTRODUCTION

Bacteria have existed before humans as the first forms of life on earth, with the need to adapt to environmental conditions and changes in time. Many bacteria use 'quorum sensing' (QS) to control their gene expression in response to their population density. During specific stages of growth or other inputs like environmental stresses, the bacteria produce signaling molecules at a threshold concentration, which signal other regulators that can induce or repress target genes (Frederix et al., 2011). Bacteria with the development of communication capabilities (e.g., quorum sensing, chemotactic signaling, and plasmid exchange), afford better adaptability to growth conditions (Ben-Jacob, 2003). Additionally, bacteria can form structured colonies to increase their benefits from accessing resources, a characteristic that individual bacterial cells cannot effectively utilize (Shapiro, 1998).

Much research has been performed to study bacterial growth properties and characteristics (Schaechter, 2015). It has been demonstrated that bacteria will grow in a predictable pattern, with four distinct phases, when placed in a suitable medium. Initially, the bacteria will grow rather slowly (lag phase), before reaching a maximum growth rate with greater rapidity (log phase). Following that, bacteria reach a plateau phase where the rate of growth and death becomes equal (stationary phase). In the final decline phase, the rate of cell death exceeds the rate of growth. The growth curve of the bacterial population is similar to other living populations in a restricted area (Henrici, 1928). In a way, bacteria have the ability of 'linguistic' communication and social intelligence (Jacob et al., 2004).

Antibiotics have been developed to combat disease-causing bacteria, such as infections, tuberculosis, gonorrhea, plague, or anthrax, among

others. However, bacteria have the ability to become resistant to antibiotics under prolonged selection pressures. According to the Center for Disease Control and Prevention (CDC) (Control et al., 2014), antibiotic resistance is one of the most serious health threats. Each year in the U.S., at least 2.8 million people get an antibiotic-resistance infection, and over 35,000 people die. Due to the increase in resistance rates to conventional antibiotics, alternative methods such as bacteriophage therapy (Golkar et al. 2014), predatory bacteria (Kadouri et al., 2013), or bacteriocins (Cotter et al., 2013) are being investigated. Additionally, many varieties of compounds produced by plants have proved to have therapeutic potentials and antimicrobial effects or elicit modifications to antibiotic resistance (Sibanda et al., 2007). Another alternative for growth inhibition of resistant bacteria is attenuation of bacterial virulence by inactivating the QS system of a pathogen (Hentzer et al., 2003).

Very little information is available on the complementary therapy methods that can induce changes in bacterial population growth status in culture media. The nature of consciousness and its place in science have received much attention in the current century. Many philosophical and scientific theories have been proposed in this area. In the 1980s, Mohammad Ali Taheri introduced novel fields with a non-material/non-energetic nature named Taheri Consciousness Fields (TCFs). In this perspective, T-Consciousness is one of the three existing elements of the universe apart from matter and energy. According to this theory, there are various TCFs with different functions, which are the subcategories of a networked universal internet called the Cosmic Consciousness Network (CCN). The major difference between the theory of TCFs and other theoretical concepts about consciousness is related to the practical application of the TCFs. These fields can be applied to all living



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9

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and non-living creatures, including plants, animals, microorganisms, materials, etc.

Mohammad Ali Taheri, the founder of Erfan Keyhani Halqeh, a school of thought, introduced a new science in 2020 as a branch of this school. He coined the term Sciencefact for this new science because it utilizes scientific investigations to prove the existence of T-Consciousness as an irrefutable phenomenon and a fact. Although science focuses solely on the study of matter and energy and Sciencefact, by contrast, explores the effects of the [non-material/non-energetic] TCFs, Sciencefact has provided a common ground between the two by conducting reproducible laboratory experiments in various scientific fields, and it has used the scientific approach in proving TCFs.

The influence of the TCFs begins with the Connection between CCN as the Whole Taheri Consciousness of the universe and the subjects of study as a part. This Connection called "Ettesal" is established by a Faradarmangar's mind (a certified and trained individual who has been entrusted with the TCFs). The human mind has an intermediary role (Announcer) which plays a part by fleeting attention to the subject of study and then the main achievement obtained as a result of the effects of the TCFs. These fields cannot be directly measured by science, but it is possible to investigate their effects on various subjects through reproducible laboratory experiments (Taheri 2013).

The research methodology in the study of T-Consciousness has been founded on the process of *Assumption, Argument, and Proof*, in which the basic Assumption is: The Cosmos was formed by a third element called T-Consciousness that is different from matter and energy.

The Argument: The existence of TCFs can be demonstrated by their effects on matter and energy (e.g., humans, animals, plants, microorganisms, cells, materials, etc.)

The Proof is the scientific verification of the effects of TCFs on matter and energy (according to the Argument) through various reproducible scientific experiments.

Accordingly, to investigate and verify the existence, effects and mechanisms of TCFs, the following five research phases (Phases 0 through 4), and the aims of each phase are outlined below.

Phase-0 studies aim to prove the existence of TCFs by observing their effects. The nature of T-Consciousness and what it is will not be addressed in this phase. Phase-1 explores the varied effects of different TCFs. Phase-2 examines the reason behind the varied effects of these fields. Phase-3 investigates the mechanism of TCFs effects on matter and energy. Finally, Phase-4 draws significant conclusions, particularly with regard to the *mind and memory of matter* and their relation to the T-Consciousness, etc.

In previous studies, the effects of Faradarmani CF were investigated on change in cancer cell growth (Taheri et al., 2020a), electrical activity in the brain of Faradarmangars (Taheri et al., 2020b), and wheat plants (Torabi et al., 2021). In this study, the influence of Faradarmani Consciousness Field on the growth behavior of different populations of laboratory and nosocomial bacterial strains is investigated.

MATERIALS AND METHODS

Faradarmani Consciousness Field application

TCFs were applied to the subjects of this study according to the protocols mentioned on the website of the TCFs research center (www.cosmointel.com). Obtaining an announcement (Connection to the CCN) is free of charge (in the "Assign Announcement" section). In order to study at any time and place, the researchers are asked to in-

Introduce the test specifications including the number of samples and their assigned names to the guidance center. It should be noted that this study was conducted in a double-blinded way, meaning that the experts were completely unfamiliar with TCFs theory. Also, the person who established the T-Consciousness Connection was unfamiliar with the details of this study.

Turbidimetry of the primary selected bacterial strains at 24 hours

Bacterial growth under the influence of Faradarmani CF was measured by turbidimetry at OD600 nm in tube cultures. For this purpose, 36 test tubes containing 10 ml of Müller-Hinton Broth medium were prepared and autoclaved. Two sets of the culture tubes were inoculated with 10² and 10⁵ cfu/ml of test microorganisms. Control and treatment samples were placed in a separate holder in an incubator at different levels. A sampling of cultures was done 24 hours after the start of incubation with a volume of 1.5 ml.

Bacterial growth analysis at different time intervals

For additional interpretation of the growth behavior of bacteria under treatment, bacterial growth changes were measured by three methods: (1) turbidimetry at OD 600 nm, (2) colony counting, and (3) assay of the bacterial regenerative power in reduction of tetrazolium chloride. To evaluate the effect of Faradarmani CF in different time intervals, sampling was done three times in two different experiment steps: in the first step, at

6, 16 and 24 hours and in the second step at 1, 3 and 6 hours.

In this experiment section and in the first step, 8 test tubes containing 10 ml of Müller-Hinton Broth medium and 8 Erlenmeyer 100 containing 20 ml of Müller-Hinton Broth were prepared and autoclaved. For each of the studied microorganisms in step 1, one tube and one Erlenmeyer flask were considered as the control group and one tube and Erlenmeyer flask was considered as the treatment group. In step 2, only growth in the Erlenmeyer flask was considered.

One ml of bacteria with 10⁵ cfu/ml was added to each tube and Erlenmeyer flask culture medium. Control and treatment samples were placed in a separate holder in an incubator on the different levels. Erlenmeyer flasks were placed in shaker incubators with separate rows and the longest distance between control and treatment samples. A sampling of cultures was done at 6, 16 and 24 hours (in step 1) and at 1, 3 and 6 hours (in step 2) after the start of incubation with a volume of 1.5 ml. Turbidity was measured at 600 nm (for step 1 of this experiment section) and surface culture was done for colony count (in two replications) for each culture medium in the two mentioned steps. For cell survival assay by tetrazolium chloride, in step 1, we added 10 µl of 1 mg/ml aqueous solution to 1 ml of microbial sample and after one hour of incubation at 35 °C, the absorbance of the samples was read at 495 nm. In step 2, all procedures were similar to step 1, except that the concentration of tetrazolium chloride was used at 100 times more than in step 1.



RESULTS

Faradarmani CF Effect on the primary selected bacterial strains at 24 hours

In order to investigate the effect of Faradarmani CF on bacteria, four laboratory strains and five nosocomial strains were used. Efficacy was reported based on the percentage of reduction of microbial populations, as shown in Table 1.

According to the results presented in Table 1, the highest decrease in the percentage of laboratory microbial populations was observed in the 10^5 cfu/ml concentration of *S. aureus* and the lowest decrease was observed in the same concentration in the case of *E. coli*. The varying initial microbial populations of gram-positive or negative bacteria do not show a significant difference in the results. Moreover, in nosocomial bacteria, the highest decrease in the percentage of the microbial population was observed in the 10^5 cfu/ml concentration of *S.aureus* (2) and the lowest decrease in the same concentration in the case of *S. aureus* (2). Overall, according to the results, the effects of the Faradarmani CF on nosocomial strains are less than that of laboratory strains.

Faradarmani CF influence on bacterial growth at different time intervals

Escherichia coli, *Pseudomonas aeruginosa*, *Staphylococcus aureus* and *Bacillus subtilis*, were used to study the effect of Faradarmani CF treatment on the growth behavior of bacteria. In the first step, the growth of the selected strains was examined at 6, 16, and 24 hours in both tube and Erlenmeyer flask culture of bacteria through turbidity measurements, colony counting, and tetrazolium chloride reduction methods. After consideration of the results of the first step of this section, in the second step, similar studies were done at 1, 3, and 6 hours in Erlenmeyer flask condition through colony counting and tetrazolium chloride method as discussed below.

Turbidity measurements

In order to investigate the results of the previous section and to study changes in populations at different times, we assessed bacterial growth by the tur-bidimetric method at 6h, 16,h and 24h. The tube method is the conventional way of studying the

Table1. Absorption changes at 600 nm for tube bacterial culture at 24 hours.

Types of strain	Strain*	Characteristics (Gram)	%Reduction (Early population: 10^2)	%Reduction (Early population: 10^5)
Laboratory	<i>E.coli</i>	Symbiotic (G-)	18.38	8.7
	<i>K.pneumoniae</i> (1)	Symbiotic (G+)	33.78	17.32
	<i>S.aureus</i> (1)	Symbiotic (G+)	24.17	45.04
	<i>B.subtilis</i>	Environmental (G+)	24.4	26.98
Nosocomial	<i>P.aeruginosa</i> (1)	Pathogenic (G-)	4.2	6.2
	<i>P.aeruginosa</i> (2)	Pathogenic (G-)	1.7	12.7
	<i>K.pneumoniae</i> (2)	Pathogenic (G+)	5.6	0.7
	<i>S.aureus</i> (2)	Pathogenic (G+)	5.4	0.6
	<i>S.aureus</i> (3)	Pathogenic (G+)	7.6	1

* The numbers in parentheses refer to different strains of a bacterial species.

antimicrobial effects of antibiotics, whereas the Erlenmeyer flask provides a more suitable growth medium for bacteria due to better aeration and uniformity of the growth medium. In this study, to determine the effect of treatment, both tube and Erlenmeyer methods were used, and the results are shown in tables 2 and 3.

The results of tube and Erlenmeyer flask culture by turbidity measurement show that there are differences in the absorption of control and treatment samples, and the difference in absorption for the 6-hour culture time is greater than the 16-hour and 24-hour culture time. The difference in absorption in 6 hours after culture shows a

greater difference, which can be due to the greater effect of Faradarmani CF treatment on bacteria during this time. This trend can also be compensated by the growth of bacteria in the continuation of cultivation. Interestingly, we observed an increase in growth and colony counts (number of colonies) of the reduced population of bacteria in cases such as the 24-hour culture of *E.coli* and *B. subtilis*, in both tube and Erlenmeyer flask cultures.

Colony count measurements

Since live and dead bacteria are indistinguishable in the turbidity method, the colony counting method was used to measure the status of bacte-

Table2. Absorption change at 600 nm for tube bacterial culture at 6, 16 and 24 hours in Control and Faradarmani Consciousness Field treatment samples.

Types of strain	Strain	OD _{600nm}						Efficacy of treatment (%)		
		6 hours		16 hours		24 hours		(-): Decrease in population (+): Increase in population		
		Control	Treatment	Control	Treatment	Control	Treatment	6h	16h	24h
Laboratory	<i>E. coli</i>	0.168	0.121	0.436	0.409	0.878	0.950	-27	-6	+8
	<i>B. subtilis</i>	0.023	0.021	0.161	0.148	0.333	0.282	-8	-8	-15
Nosocomial	<i>P. aeruginosa</i>	0.121	0.113	0.379	0.125	0.985	0.853	-7	-67	-13
	<i>S. aureus</i>	0.152	0.132	0.157	0.135	0.195	0.192	-13	-14	-1.5

Table3. Absorption change at 600 nm for bacterial culture in Erlenmeyer flask culture at 6, 16 and 24 hours in Control and Faradarmani Consciousness Field treatment samples.

Types of strain	Strain	OD _{600nm}						Efficacy of treatment (%)		
		6 hours		16 hours		24 hours		(-): Decrease in population (+): Increase in population		
		Control	Treatment	Control	Treatment	Control	Treatment	6h	16h	24h
Laboratory	<i>E. coli</i>	0.157	0.125	1.635	1.428	2.403	2.295	-20	-12	-4
	<i>B. subtilis</i>	0.025	0.015	0.936	0.841	2.380	2.440	-40	-10	+2
Nosocomial	<i>P. aeruginosa</i>	0.380	0.301	0.606	0.532	1.816	1.680	-20	-12	-7
	<i>S. aureus</i>	0.150	0.126	0.204	0.222	2.208	1.981	-16	+8	-10

ria in the culture medium. For this purpose, in the first step, tube and Erlenmeyer flask cultures were cultured at 6, 16, and 24 hours in Müller-Hinton medium with two replications and then counted. The results of colony count are given in Tables 4 and 5.

Colony count results for 24-hour samples were not possible due to overgrowth (NC) and in cases where the count numbers of one of the control or treatment samples were not obtained, it was not possible to determine the percentage of treatment efficiency. In other cases, the results of colony counts showed the effects of the Faradarmani CF treatment on declining the bacterial population, although, in the case of *P. aeruginosa* at 6 hours,

the opposite result (increase in population) was observed.

In step 2 and after observing the effects of the Faradarmani CF in the first step in turbidity measurement and colony counting, the colony counting of Erlenmeyer flask samples was repeated and sampling was done at 1, 3, and 6 hours. The results of this step are given in Table 6.

As can be seen in Table 6, the effects of the Faradarmani CF treatment in the first hour of study are greatest in the two laboratory strains and *P. aeruginosa*. Moreover, *S. aureus* shows the greatest reduction up to 3 hours. These results are in agreement with Table 2, which demonstrates a decrease even in the early treatment times.

Table4. Colony count results of Faradarmani Consciousness Field treatment and control samples in tube culture method at 6, 16 and 24 hours.

Types of strain	Strain	Colony Count						Efficacy of treatment (%)		
		6 hours/10 ⁴		16 hours/10 ⁶		24 hours		6h	16h	24h
		Control	Treatment	Control	Treatment	Control	Treatment			
Laboratory	<i>E. coli</i>	NC*	NC	357	285	NC	NC	ND**	-20	ND
	<i>B. subtilis</i>	55	40	20	16	NC	NC	-27	-20	ND
Nosocomial	<i>P. aeruginosa</i>	398	NC	49	41	NC	NC	ND	-16	ND
	<i>S. aureus</i>	310	184	37	29	NC	NC	-39	-25	ND

NC * means uncountable; ND** Not determined

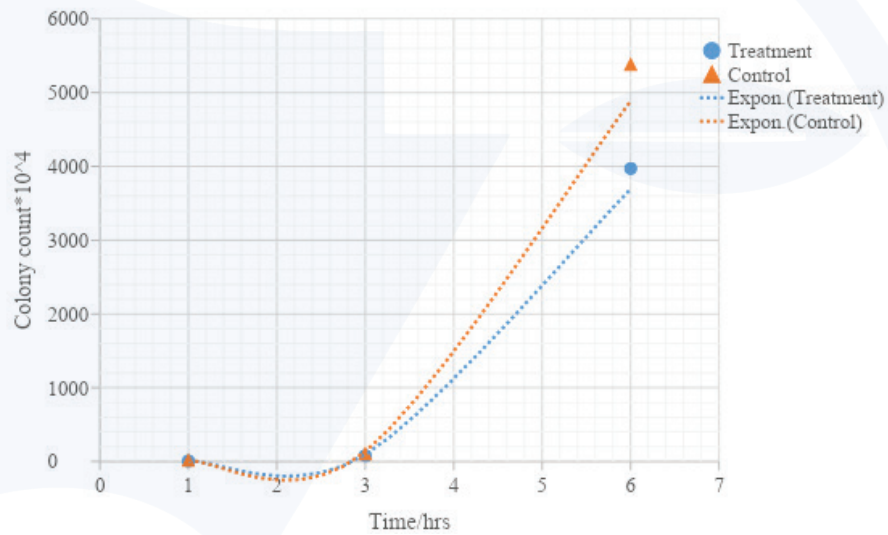
Table5. Colony count results of Faradarmani Consciousness Field treatment and control samples in Erlenmeyer flasks at 6, 16 and 24 hours.

Types of strain	Strain	Colony Count						Efficacy of treatment (%)		
		6 hours/10 ⁴		16 hours/10 ⁶		24 hours/10 ⁸		6h	16h	24h
		Control	Treatment	Control	Treatment	Control	Treatment			
Laboratory	<i>E. coli</i>	NC	1328	433	320	NC	NC	ND	-26	ND
	<i>B. subtilis</i>	190	124	51	45	NC	NC	-34	-11	ND
Nosocomial	<i>P. aeruginosa</i>	169	179	487	352	NC	NC	+6	-27	ND
	<i>S. aureus</i>	NC	100	64	53	NC	NC	ND	-16	ND

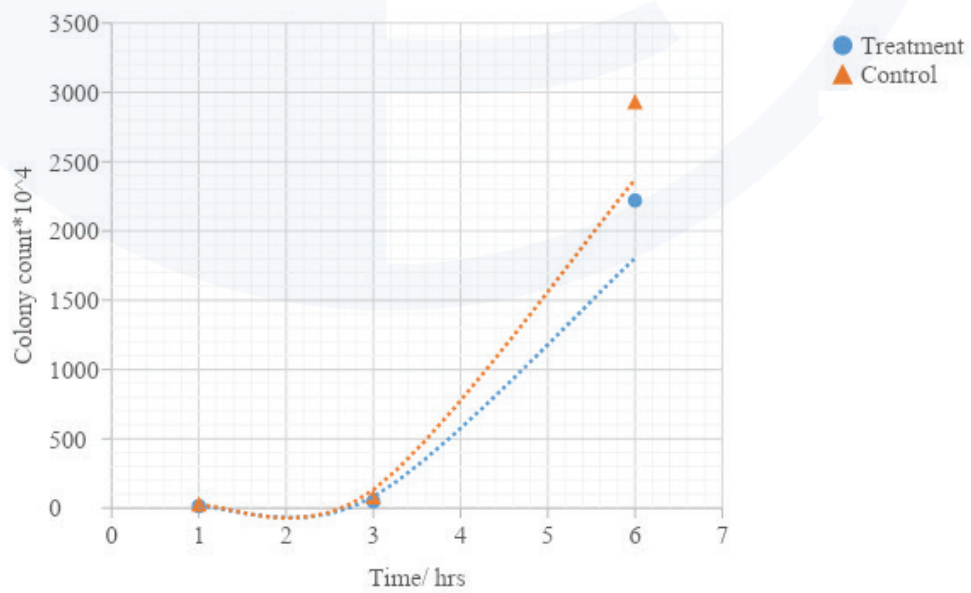
Table 6. Colony counting of Faradarmani Consciousness Field treatment and control samples in Erlenmeyer flasks at 1, 3 and 6 hours.

Types of strain	Strain	Colony Count						Efficacy of treatment (%)		
		1 hours/10 ⁴		3 hours/10 ⁴		6 hours/10 ⁵		1h	3h	6h
		Control	Treatment	Control	Treatment	Control	Treatment			
Laboratory	<i>E. coli</i>	14	9	105	78	538	397	-35	-23	-26
	<i>B. subtilis</i>	3.4	2.2	6.2	4.3	9.6	7.5	-34	-30	-22
Nosocomial	<i>P. aeruginosa</i>	26	13.9	77	48	293	222	-46	-37	-24
	<i>S. aureus</i>	11.9	9.1	35	24	88	73	-23	-31	-17

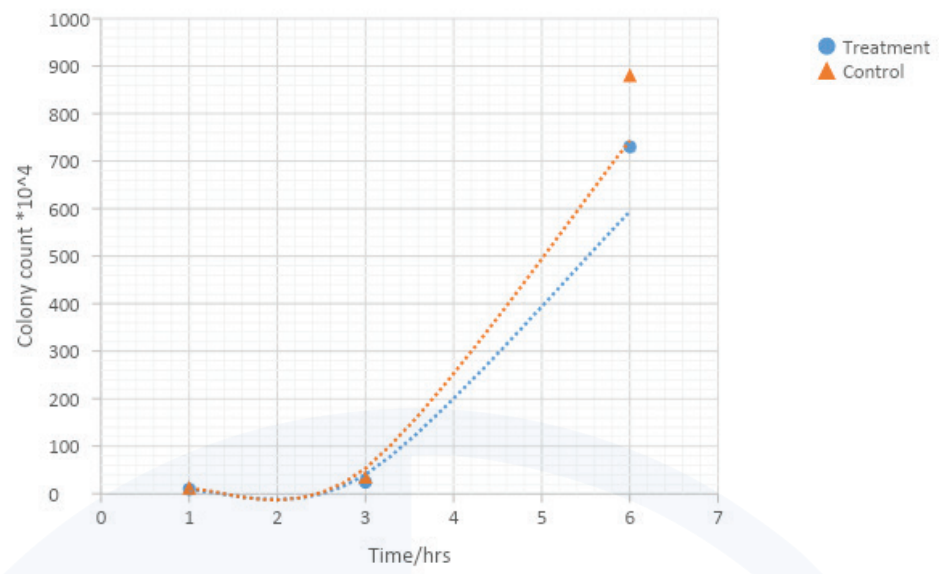
A



B



C



D

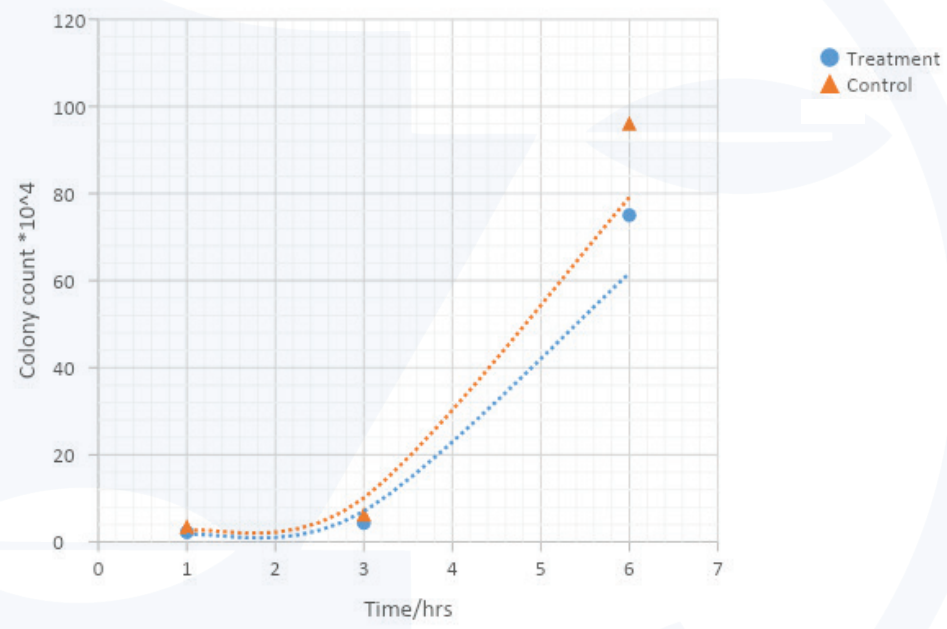


Figure 1. Exponential growth plot in the first three hours of the bacterial life cycle of Faradarmani Consciousness Field treatment sample in comparison with the control samples. A: *E. Coli*; B: *B. Subtilis*; C: *P. aeruginosa*; D: *S. aureus*.

As shown in figure 1, the exponential growth plot in the first 6 hours of the Faradarmani CF treatment and control population shows a significant and visible effect of this field on the various bacterial populations in the first 1 to 3 hours of the bacterial growth.

Tetrazolium chloride reduction assay

Tetrazolium chloride compound was used to evaluate the metabolic status of bacteria and possible changes in bacterial regenerative power that indicate cell viability. The reduction of tetrazolium chloride by dehydrogenase enzymes in healthy bacterial cells produces a red color that is capa-

ble of absorbing light at 495 nm. For the tetrazolium chloride method in the first step, in 6 and 16 hours, we did not record a measurement due to low microbial concentration and low color. The earliest time measurement was possible was at the 24 hours as shown in Table 7.

The Erlenmeyer flask culture shows a more consistent result with the population decline in the previous methods. However, the results of this method for tube culture of bacteria are consistent with previous results and show a higher growth

rate in the treated microbial samples than in the control (compared to efficacy results in tables 2, 3 and 5). Tetrazolium chloride assay was also done on bacterial populations at 1, 3 and 6 hours, as shown in Table 8.

In Table 8, the longer time in the Tetrazolium chloride reduction assay causes the greatest decrease in populations and survival occurs only in the first 1 hour of the experiment (in the case of *B. subtilis* in the first 3 hours).

Table7. Tetrazolium chloride reduction assay of tube and Erlenmeyer flask bacterial culture by absorbing light at 495 nm at the 24 hours in Control and Faradarmani Consciousness Field treatment samples.

Types of strain	Strain	Tube culture			Erlenmeyer flask culture		
		A_{495nm}		Efficacy of treatment (%)*	A_{495nm}		Efficacy of treatment (%)*
		Control	Treatment		Control	Treatment	
Laboratory	<i>E. coli</i>	1.7519	1.1173	-36	1.1426	1.0929	-4
	<i>B. subtilis</i>	0.4960	0.7915	+59	0.3839	0.2790	-27
Nosocomial	<i>P. aeruginosa</i>	0.6679	0.7043	+5	2.4616	2.0637	-16
	<i>S. aureus</i>	0.6063	0.7886	+30	0.7366	0.6544	-11

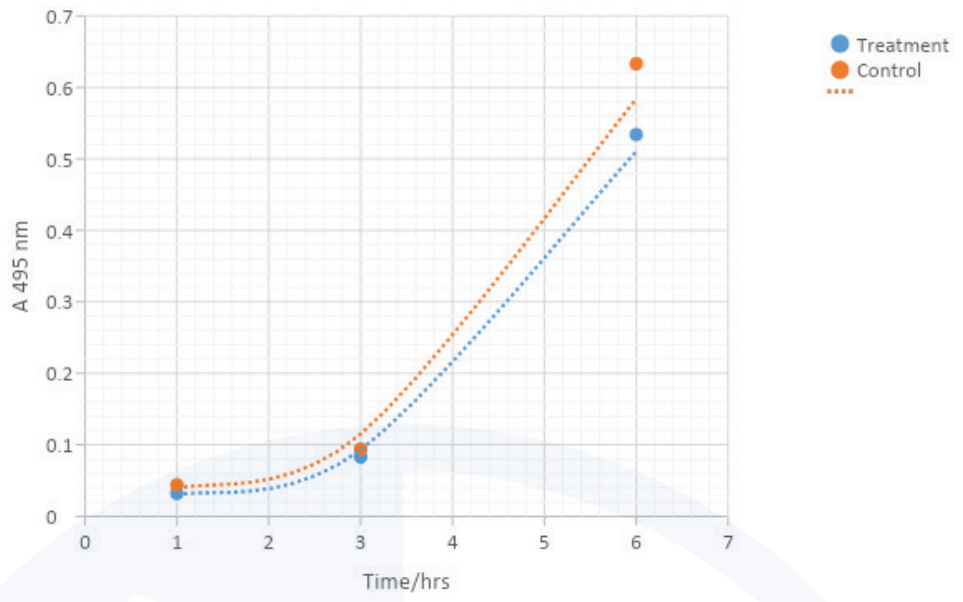
* +: Increase in population; -: Decrease in population

Table8. Tetrazolium chloride reduction assay of Erlenmeyer flask bacterial culture by absorbing light at 495 nm at 1, 3, and 6 hours in Control and Faradarmani Consciousness Field treatment samples.

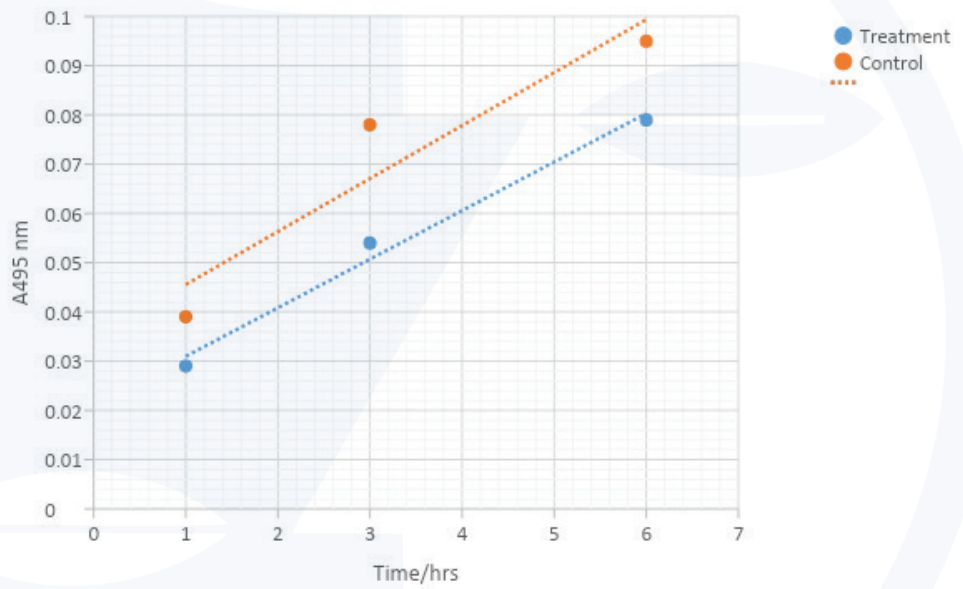
Types of strain	Strain	A_{495nm}						Efficacy of treatment (%)		
		1 hour		3 hours		6 hours		1h	3h	6h
		Control	Treatment	Control	Treatment	Control	Treatment			
Laboratory	<i>E. coli</i>	0.044	0.032	0.094	0.083	0.633	0.534	-27	-11	-15
	<i>B. subtilis</i>	0.039	0.029	0.078	0.054	0.095	0.079	-25	-30	-17
Nosocomial	<i>P. aeruginosa</i>	0.058	0.046	0.085	0.076	0.169	0.134	-20	-10	-20
	<i>S. aureus</i>	0.054	0.037	0.067	0.063	0.094	0.086	-31	-5	-8



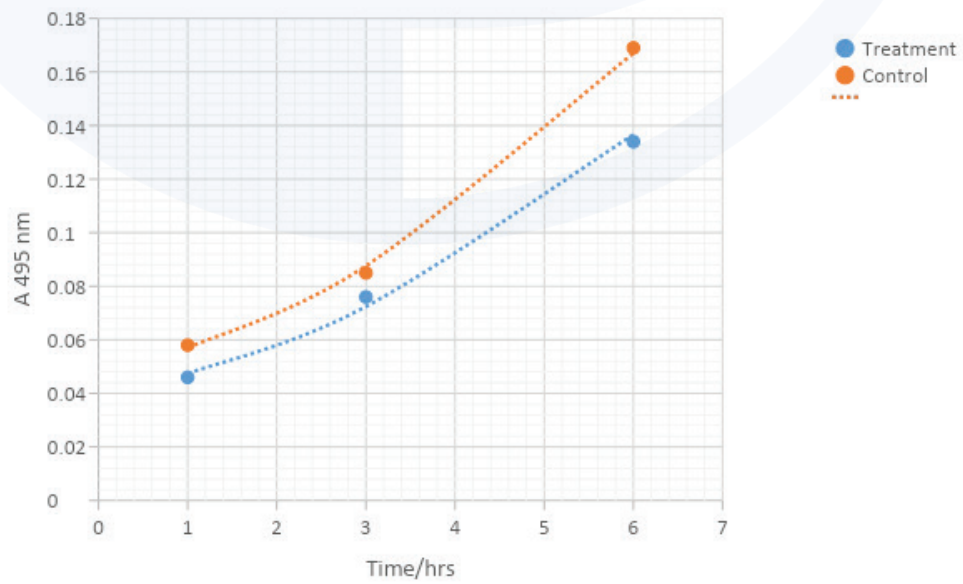
A



B



C



D

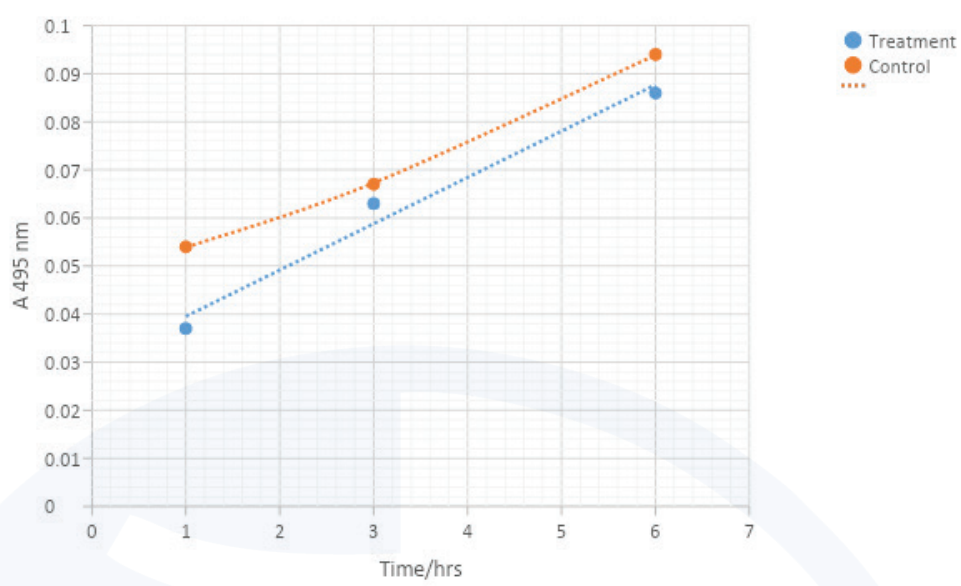


Figure 2. Change in tetrazolium chloride reduction in the first three hours of the bacterial life cycle of Faradarmani Consciousness Field treated sample in comparison with the control samples. A: *E.coli*. B: *B.subtilis*. C: *P.aeruginosa*. D: *S.aureus*.

Figure 2 depicts exponential and logarithmic graphs of reduced rates of bacterial growth in tetrazolium chloride assay. Similar to the data obtained from other measurement methods for the same strains, we observe a general reduction in regenerative capacity in the Erlenmeyer culture treatment samples. The increase in regenerative capacity at 3 hours, in the case of *S. aureus* treatment, indicates better survival condition of the remaining bacterial populations, when compared to the tube culture of *B. subtilis*, *P. aeruginosa*, and *S. aureus* strains.

DISCUSSION

Changes in the bacterial populations under Faradarmani Consciousness Field, as mediated by the human mind, is a novel study. The experiments in this study were initially performed on the diverse bacterial populations to evaluate the initial effects of the T-Consciousness Field 24 hours after the start of cultivation and treatment. In order to

examine the reproducibility of the results and better interpret them, strains were selected from these tests, and at other intervals of the bacterial growth cycle (6 to 24 hours) through sampling, repetition, and completion of growth tests. Finally, in the last stage, after confirming the observations in the previous stages, a supplementary study was performed to investigate the effects of the T-Consciousness Field, at shorter intervals of the bacterial life cycle (less than 6 hours).

T-Consciousness Fields are immaterial and non-energetic fields with the ability to affect a variety of living and non-living systems from the atom to cells, to organisms. The general functions of these fields are to establish a *connection* between the subject under study and the CCN, with the aim of reconstructing, modifying, and repairing in order to achieve the optimal structure and performance of the system under study in its environment. What is observed in the present study is the reproducibility of a significant effect of the T-Consciousness Field on bacterial

population growth. This effect occurs at first glance, with a decrease in growth. On closer inspection, we found a concomitant change in the remained bacterial populations that have a higher ability to live and survive. In examining the results of the effect of Faradarmani CF on bacterial population growth and comparing it with respective control groups, the following summaries can be made: (1) The Faradarmani CF affects the selected population of bacteria in this study. This effect has been proved by studying different types of strains and repeating the study and sampling at different times and using complementary live and dead assay methods; (2) The effect of Taheri Consciousness Field treatment begins in the first hour of bacterial culture, simultaneously with the start of treatment and the synchronicity between the treatment and its effects can be observed.

(3) The effect has two manifestations: (a) population declines up to 46% in different bacteria and its evidence is seen in both tube and Erlenmeyer culture media at different times of sampling (different stages of the bacterial life cycle), and (b) increase in the ability to regenerate and survive in the remaining bacterial populations, which in the conditions of tube culture are up to 60% in different bacterial strains; (4) laboratory bacterial strains show a greater decrease in growth than nosocomial strains with no significant difference in the initial population of bacteria or in their gram-positive or negative characteristics; (5) Changes in environmental conditions

(comparison of tube culture and Erlenmeyer culture) show the effects of the T-Consciousness Field differently: the tube culture conditions, which are considered harsh environmental conditions for bacterial life, perform better than Erlenmeyer environment in showing the effect of the T-Consciousness Field on bacterial survival.

CONCLUSION

According to Taheri's theory, T-Consciousness is neither matter nor energy, therefore, it is non-quantifiable and cannot be directly observed or measured. However, it is possible to screen its effects through various experiments. In order to further investigate bacterial populations affected by the TCFs, studies on other bacterial strains and especially on the antibiotic resistance of important nosocomial resistance bacterial strains are strongly recommended. Given the reproducibility of the application of TCFs, we suggest other researchers conduct studies on other types of TCFs to observe the metabolic and physiological changes of bacteria under the influence of these newly explored fields.

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Vol. **01**
No. **02**
Autumn
20**21**

21

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