A Prospective Study of Singing on the Development of Cacti and Succulent Plants – A Medical Satire

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DOI: https://doi.org/10.62830/mmj3-01-30

Abstract:

A prospective study was conducted to determine if singing could nullify the effects of neglect, overwatering, and other parameters on cacti and succulents. Singing was found to have a positive impact on plants. Application of these findings to healthcare professionals at Max Healthcare may improve clinical care and lead to happier patients.

Key words: Cacti, Succulents, Singing, Happiness.

Introduction

Before introducing any new method of treatment, experimental studies are needed to validate its viability and use on human beings. Plants serve as ideal subjects to determine whether a procedure is feasible. Plants, too, have feelings, and it has been carefully observed that when they are treated with love, fertiliser, and water, they tend to thrive. Rapid growth was noted amongst the Cycas plants in Max Hospital, Saket, when provided with fertiliser and water at regular intervals; daily observation from the windows of the operating room, between surgeries, has borne this out. Chowdhary and Gupta[1] noted that music assisted the growth of marigolds (*Tagetes* species) and chickpeas (*Cicer arietinum*), while noise hindered it. Jung and colleagues[2] suggested that sound could benefit growth in plants. These studies demonstrated beneficial growth despite the absence of an auditory mechanism in plants. It remains unclear whether sound vibration can cause harm or whether prolonged exposure may inhibit, rather than enhance, growth.

It was speculated whether singing, in addition, would be an asset in plant growth. Dr. Sunil Katoch is well established as a soloist, while Dr. Sameer Anand is a vocalist in his own right. It was decided that Dr. H. N. Bajaj could also be included, but the demise of two plants in two consecutive days after his attempts as a crooner quickly led to his re-designation as 'Marg Darshak', in a planning and supportive role. It was felt that his voice would not pass the principle of 'Primum non nocere'.

Materials and Methods

Five cacti and five succulent plants of the same age and weight were placed on windowsills. A similar regimen of minimal water and fertiliser was administered regularly. It was decided that Dr. Sameer would employ his vocal cords to the best of his ability, using a mixture of songs from various movies. To obviate any bias, Dr. Katoch sang the same songs towards the evening. Out-patient department (OPD) timings and operating theatre timings were carefully managed with the cooperation of helpful nursing staff, theatre managers, and indulgent patients. The senior member of the team, Dr. H. N. Bajaj, undertook the job of assessing the findings.

The following parameters were recorded: neglect, overwatering, unsolicited touching, spike density, leaf turgidity, gardener guilt, and the effect of singing.

Observations and Results

While the detailed parameter analysis is documented and available upon request, an abbreviated format has been used in the interest of brevity. The editorial board was unanimous that this article deserved publication since keeping plants on windowsills is a usual practice, neglect is commonplace, and singing to them is in vogue since time immemorial. Many notable playback songsters have entered the portals of Bollywood by honing their skills using this method. It is hoped that one day members of the Max medical profession, too, would make a similar grand entry.

Cacti

It was noted that the cacti on the windowsill continued to thrive despite neglect.

Overwatering was rarely a problem as surplus water simply drained out of the containers. Unsolicited touching occasionally led to impalement of the skin and visits to the infirmary for emergency extraction of embedded spikes. The density of the latter maintained its character and continued to vigorously defend the plant from any predatory advance. Since cacti are bereft of leaves, there was no question of assessing leaf turgidity. Gardener guilt remained an issue, with most shying away. Singing was undoubtedly effective ($p < 0.001$) in adding to the growth of the plant. The choice of song, timing, and duration seemed to be well tolerated by these botanical specimens.

Succulents

On the contrary, succulents were far more sensitive. They responded poorly to neglect and demonstrated yellowing of leaves, such that it seemed they were afflicted with an agricultural version of jaundice. They disliked being watered and reminded of one's childhood when a daily bath was de rigueur, and excuses were trotted out with isochronous regularity. Our succulents shunned touch, as if they were more sacrosanct than Roman Vestal Virgins. Gardener guilt was also an issue as the majority were invariably found in the staff canteen, engaged in light refreshment. Singing was completely therapeutic, even when Dr. Anand rendered a few Tamil and Bhojpuri numbers, followed by Dr. Katoch with nostalgic melodies in the style of Kundan Lal Sehgal, which largely appeal to seniors.

The neighbours were occasionally seen wiping their eyes at the conclusion of the recital. It is extremely difficult to say if their emotional response was due to his songs or due to their perceived gratitude at the conclusion of his recital. Nevertheless, the botanical specimens appeared to flourish thereafter. It was noted that they exhibited rapid sequestration of any surplus water and responded with an outburst of fresh growth.

Discussion

This study clearly shows that plants are responsive biological organisms that respond well to carefully regulated doses of fertiliser and water. Overwatering is likely to harm the plant unless the container permits the excess water to drain adequately. Clearly, it may be inferred that they do not like "wet feet."

It can be deduced from this study that singing to plants is an effective way to bond with them. Plants respond with vigorous growth. Care has to be taken that the singers are musically inclined and not excessively loud or discordant, as this may influence the overall effect. At the same time, it becomes clear that singers need not be professionals.

Though the numbers in this study are small, these findings establish that there can be no strategic detachment between cacti and succulents (or any plant), as the requirements are determined to be more or less the same. The succulents did seem startled and perhaps sceptical about the procedure, but they rapidly settled down and enjoyed the singing of both Dr. Anand and Dr. Katoch. Certainly, it would be torture and unimaginable cruelty if Dr. H. N. Bajaj were to warble as well.

The next part of the study was deemed unnecessary. It was to focus on the effect of singing on our patients. However, the easy availability of music and songs on mobile phones renders this objective unnecessary, since patients can switch on or off these devices whenever so inclined. Extrapolating these data affirms that singing and music may serve as useful additions to patient well-being. This significant finding may be of value to consultants at Max Hospital. Perhaps one may find them singing in the hospital corridors, as they go about their ward rounds. Certainly, patients would be happier.

Declarations

Conflict of interest

This facetious study is entirely self-funded, and there are no potential biases.

Disclaimer

No malice is intended towards the participating plants or colleagues. Those who feel strongly about cruelty towards plants will be glad to learn that no plant died. Rather, they are robust and flourishing.

Editor's Comment

This article is written as a tongue-in-cheek observational study by our spine orthopaedics team. There are numerous studies suggesting that plants respond to environmental stimuli. Additionally, music therapy has a recognised role in healing and post-traumatic stress disorder.[3,4]

Conclusion

This light-hearted yet thoughtfully conducted study reinforces an enduring truth: attentive care, balanced nourishment, and a touch of melody can work wonders — even for the stoic cactus and the sensitive succulent. While firmly rooted in satire, our observations echo a broader principle applicable to both botany and medicine: environments enriched with warmth, rhythm, and mindful engagement foster growth and well-being.

H. N. Bajaj, Sunil Katoch, Sameer Anand. A Prospective Study of Singing on the Development of Cacti and Succulent Plants – A Medical Satire. MMJ. 2026, March. Vol 3 (1).

DOI: https://doi.org/10.62830/mmj3-01-30

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