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June 2016

What About Dolphin-Assisted Therapy? From Playing the Clown to “Cure” Psychological Disorders

By Joan Gonzalvo

Dolphins have awakened curiosity and some kind of fascination to humans since ancient times. Throughout history, myths and legends, abundant references can be found to dolphins as healers, even as savers of those in need, suggesting a natural “connection” between these marine mammals and humans.

Cetaceans, dolphins and whales, were first captured for public display in the 1850's. One of the first documented cases corresponds to circus mogul P T Barnum, who kept wild-caught beluga whales in an aquarium at his museum in New York City. Since then, the popularity of dolphin displays in which trainers were engaged in increasingly daring aquatic gymnastics and the animals forced to perform clownish shows and stunts, grew dramatically, especially in the 1960s and 70s. More recently, as result of an increasing awareness among the public on animal welfare issues, the marine parks industry has adopted the strategy of rebranding themselves as centres of education, research and conservation rather than as part of the entertainment business industry.

It is undeniable that dolphins with their obvious intelligence and their omnipresent smiles do not leave anybody indifferent. For over a decade I have been working with teams of volunteers, who join us in the field to contribute to the work conducted by Tethys Research Institute on coastal dolphins in Western Greece, in the context of our citizen-science program. Hence, on numerous occasions, I witnessed how people were moved, even overwhelmed when encountering dolphins in the wild. Such a reaction, often described by those involved as pure joy, can be sometimes triggered just by observing these charismatic animals bow-riding our boat or occasionally racing across the sea surface, suddenly changing speed to feed on small schooling fish. Therefore, it does not surprise me that getting into the water with a dolphin is something that lots of people dream about. In fact, many people describe their in-water encounter with a dolphin as one of the most exhilarating and transformative experiences they have ever had.

Considering all the above, it was only a matter of time before swim-with-dolphin programmes, which have become a highly lucrative component of the entertainment industry, gave rise to the concept of dolphin-assisted therapy (hereafter referred as DAT). An additional factor to convince the industry to shift towards this “therapeutic” approach could be simply that swim-with-dolphin programs may not be as fulfilling as one might have originally thought. A study¹ reviewing the feedback given by people who swam with captive dolphins showed that, although they stressed the grace, size and power of dolphins, they also believed that the experience was too staged, too short and too expensive, and were concerned with the size of enclosures and about captivity.

The exact number of DAT facilities across the world is unknown, but it is growing rapidly by proliferating globally throughout Asia, Europe, Mexico, the Middle East, Latin America and the Caribbean with several centres in the United States, mainly in Florida and Hawaii. This has been largely facilitated by the fact that there is neither an industry standard defining criteria for what constitutes DAT nor an official regulation of the practice. No authority is overseeing health and safety standards for either humans or dolphins. Moreover, although dolphins may be screened for disease, there is no legal requirement to do so. Offered as a cure or respite from human illness or disability, DAT promoters claim it can be used to treat a wide range of physical and psychological conditions, including clinical depression, speech

¹ Curtin S., Wilkes K. 2007. *Swimming with captive dolphins: current debates and post-experience dissonance*. International Journal of Tourism Research, 9: 131–146.

development, Down syndrome, autism, blindness, AIDS, and cancer. Some New Age centres, dedicated to encouraging bonds between dolphins and humans, go a step further offering assisted childbirth.

The experience offered by the industry typically involves 5-10 sessions where the client (so called “patient”) is either swimming with or interacting with captive dolphins. These 30 to 45 minutes sessions often include conventional remedial tasks, such as hand-eye coordination exercises, puzzles and motor exercises. The standard cost of DAT is often exorbitant averaging €2,000 to €5,000, not including travel and lodging expenses. It is noteworthy that such cost is significantly higher than what would be needed to cover the same kinds of therapeutic interventions without the dolphin in a traditional facility.

At the top of the list of conditions more recurrently presented as highly treatable by DAT are autism spectrum disorders (ASD). Children with ASD have reduced capacity for social interactions, such as mutual gaze, pointing, showing objects of interest and answering back when called. They show a lack of emotional resonance that disturbs the translation and interpretation of the emotions of others as well as difficulties in the development of language. The severity of the disorders’ clinical features, which frequently include profound communication deficits, may engender understandable desperation on the part of parents. Research² conducted by researchers from the Department of Psychology at Emory University, conducted a decade ago, showed that 86% of parents of children with autism had consulted websites for information regarding autism treatments (a percentage likely to have grown in recent years), while the proportion of parents who had consulted journal articles was only about half that number. This suggests that parental treatment decisions may be informed substantially more by web-based information than by information from peer-reviewed sources. Because much of the ASD treatment information available on the Web is variable in quality and frequently neglects to distinguish scientifically supported from unsupported interventions, it is virtually inevitable that those parents are routinely exposed to significant misinformation. Therefore, when coming across DAT facilities websites, often posting photos of smiling children and heartbreakingly emotional testimonials by parents claiming miraculous improvement by their child, it all looks so promising that it is hard to resist.

Some scientific studies claim DAT as beneficial for children with autism, attention deficit hyperactivity disorder, physical disabilities, and other psychological disorders. Nevertheless, the majority of the studies conducted supporting its effectiveness have been found to have major methodological concerns making it impossible to draw valid conclusions. Lori Marino and Scott O. Lilienfeld³, researchers at Emory University, evaluated the studies published between 1997 and 2008 on the effectiveness of DAT and found them methodologically flawed and plagued by several threats to both internal and construct validity. They found no compelling evidence that DAT is a legitimate therapy or that it affords any more than fleeting improvements in mood. Equally, in 2012, researchers Britta L. Fiksdal and colleagues⁴ conducted a review and critique on published studies purportedly supporting the use of DAT for children with various disorders and arrived at the conclusion that such studies “need to be better designed and threats to validity must be addressed before we deem DAT as an effective intervention for any population”. In a more recent paper “Dolphins are not healers”⁵, Marino reaffirmed her claims on “absolutely no evidence for DAT’s therapeutic effectiveness.” She stated that while there might be short-term gains, it is more likely that the feel-good effects can be attributed to being in a novel environment coupled with the placebo boost of having positive expectations, but nothing more.

Arrived to this point, let’s say that we decide to deny everything said until now: *even if DAT does not provide therapeutic results, the experience of swimming with dolphins is fun and might be an unforgettable experience, right? Where is the harm?* Well, it is not so simple.

Anyone contemplating to swim with dolphins should consider that it poses a serious risk. Dolphins, even those born in captivity, are essentially wild animals and despite their ever-smiling face, they are large, strong and unpredictable. The latter is particularly true for dolphins held in tanks where neither their physical nor their social environment can be

² Goin-Kochel, R. P., Mackintosh, V. H., & Myers, B. J. 2006. *How many doctors does it take to make an autism spectrum diagnosis?* Autism, 10: 439–451.

³ Marino L., Lilienfeld S. O. 1998. *Dolphin-Assisted Therapy: Flawed Data, Flawed Conclusions.* Anthrozoos: A Multidisciplinary Journal of The Interactions of People & Animals 11: 194–200.

Marino L., Lilienfeld S. O. 2007a. *Dolphin-Assisted Therapy for Autism and Other Developmental Disorders: A Dangerous Fad.* Psychology in Intellectual and Developmental disabilities 33: 2–3.

Marino L., Lilienfeld S. O. 2007b. *Dolphin-Assisted Therapy: More Flawed Data and More Flawed Conclusions.* Anthrozoos: A Multidisciplinary Journal of the Interactions of People & Animals 20: 239–249.

⁴ Fiksdal B. L., Houlihan D., & Barnes A. C. 2012. *Dolphin-Assisted Therapy: Claims versus Evidence.* Autism Research and Treatment 2012: 1–7.

⁵ <https://aeon.co/essays/dolphin-therapy-doesn-t-work-for-the-child-or-the-animal>

simulated or re-created causing boredom, stress and inducing frustration to say the least⁶. Indeed, on a number of occasions swimmers have suffered bites, bruises, scratches, abrasions, even broken bones and near-drownings. An added risk is the possibility of disease transmission from dolphins to humans, as in many of the countries which have these DAT programmes, there is no requirement to screen the animals for disease and their welfare is not exactly on top of the list of their priorities. No matter how obvious this may sound; it is important to highlight that in any DAT programme, the health and welfare of both the humans and the animals involved, should be the absolute priority.

Many marine parks and other facilities offering DAT programmes claim to be doing their share for conservation. Well, I am afraid that in practice it is quite the opposite; initiatives like DAT can pose a significant problem for dolphin Conservation. Many dolphins involved in DAT were captured in the wild; therefore by supporting or participating in swimming with dolphins and DAT programmes we may be giving the perfect excuse to the captivity industry to continue to do it. As an example we can look at Turkey, where many facilities offering DAT programmes were developed during the past few years⁷, becoming what is probably the main DAT destination in the Mediterranean region. In 2006 and 2007, the Turkish Ministry of Food, Agriculture and Animal Husbandry gave permissions for the capture of 23 bottlenose dolphins from Mediterranean and Marmara Seas for the purposes of “scientific research and physical and mental therapy of disabled patients”. After the Ministerial permit, local fishermen reported that illegal dolphin capture requests by facilities became more frequent and that, following the legal capture of these 23 dolphins, facilities wanted to continue dolphin capture illegally, in order to replace dead individuals⁸.

Finally, no matter how much promotion and how many ‘success’ stories are being presented to us by the captivity industry, one should keep in mind that valid alternatives to DAT do exist. Sadly, some of the families partaking in such a significant emotional and monetary investment, looking for a response to their prayers for hope, may be missing other more effective treatments. We should not look the other way and obviate the suffering of vulnerable people and dolphins alike, which are being exploited by the captivity industry simply to gain substantial economic profit. As if it was not enough to condemn dolphins to life in prison sentences and force them to play the clown for us, now they must “cure” the ill.

Commissioned by the not-for-profit organisations LAV (www.lav.it) and Born Free Foundation (www.bornfree.org.uk)

⁶ “What about Dolphins in Captivity? Five Main Reasons not to Keep Dolphins in a Pool”

http://www.bornfree.org.uk/fileadmin/user_upload/files/zoo_check/lav/Gonzalvo_5_Reasons_NoCaptivity.pdf

⁷ Some examples of DAT programmes in Turkey

-Omega Dolphin Therapy & Activity Centre <http://dolphin-therapy.org>

-Institute of the Dolphin Therapy <http://www.dolphintherapy.ru/en/>

-DolphinSwim Institute (Started in Egypt and Israel in the year 2000. Four years later his program moved to Crimea, Russia and in 2009 to the current location at DolphinLand in Antalya, Turkey). <http://www.dolphinSwim.net/en/>

-SoulScience School Antalya <http://www.dolphintherapy.eu>

“Dolphin Therapy is a form of complimentary medicine with impressive psychotherapeutic results. The dolphin’s bio-energy, vital energy which the dolphin uses to communicate with the patient, improves mood, awareness, concentration, motivation and more. Dolphins are gentle creatures who enjoy working with and helping people. On top of the bio energy, patients enjoy interacting with the dolphins. This encourages them to make strides in development.”

-Alanya Dolphinarium <http://www.alanyadolphinarium.com>

-Istanbul Dolphinarium <http://www.istanbuldolphinarium.com/eng/rehabilitasyon.html>

⁸ Bengil F., Kankuş J., & Sönmez R. 2012. *Can individual tracking systems be used for conservation of wild dolphin populations in behalf of live captures in Turkish waters?* Biharean Biologist 6 (2): 126–127.