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|  | From our months of working with our five Alzheimer�s patients at Hacienda Care Center in Livermore, we were able to gather a significant amount of data. Now whether that data is the 100% result of us doing sensory therapy with them is still unanswerable. What we do know is that for the most part, the patients were able to maintain, if not slightly increase, their general awareness and comprehension (as measured with the MMSE). Our basic attempt was to initiate continual stimulation of parts of the brain which are usually attacked first by the disease. Now whether our work and time with them was largely advantageous for the health and was effective in warding off the effects of the disease is quite questionable, but we do know that it was very beneficial for their personal happiness and well-being.  Based on our hypothesis and prediction our experiment was quite successful. While spending countless hours with our patients on numerous occasions, we were able to get the data we needed. While doing the sensory stimulation techniques, we would also try holding somewhat decent one-on-one conversations with them. We would start off discussing things like the date, the weather, or the news, stuff which occupies the short term memory; but usually they would turn the conversation into stories of their youth, or of their family, or of schools and wars. Their minds were sharp as can be when it came to events or life in the past, yet it was hard for them to remember anything in their short term memory. And with Alzheimer�s disease, short term memory is the first to go. Because an aging brain produces smaller amounts of neurotransmitters (and because neurons die), short - term memory slows down - particularly if no steps are taken to keep surviving neurons continually stimulated.  Due to the fact that Alzheimer's disease is a progressive disease that cannot be cured, we were looking for the same results (amount of points) on the MMSE as were obtained from the first time that we tested the patients. This would tell us that there was little or no progression of the disease and that the therapy slowed the effects. Thus, because our results showed that three of the five patients obtained higher scores the second time than the first time, we must take into account outside factors as having influenced our research.  One explanation for the increase in point total in patient numbers 2, 3, and 4 is moodiness. Alzheimer's disease often causes sufferers to become irratable and extremely moody from day to day. Thus, on the first day that we administered the test, we could have caught the patients on a "bad" day. This could have caused them to not want to answer questions and, therefore, not work as hard as they would have to answer the questions as they would have on a "good" day. This would be a good explanation for the jump in patient number 3's scores.  In conjunction with this idea, is the fact that we became very close with the patients. This could also have had an affect on how they answered the questions to the MMSE. After spending more time with us, the patients felt more comfortable with us, and probably felt more comfortable answering the questions that we asked. They were less timid, and most likely wanted to be able to answer the questions correctly in order to uphold their relationship with us by impressing us, giving them a better score the second time.  Patient number 5, although almost incoherent and with no score both times, seemed to be helped by the therapy. She began to recognize us as time passed. This is important because the first couple of times that we went to see her, she had no clue who we were. Similarly, patient number 2 (whose score increased) seemed to recognize us as we came in more.  Patient number 1 is the only patient whose score decreased the second time, which is more like what we expected from all of the patients. Yet, because her score only decreased by one point, our hypothesis is further supported. This is a relatively slow progression for the four months that we administered the therapy. Although we do not know what her individual normal progression, without therapy, would be, we think that it would be more drastic than one point.  Thus, the interaction with the patients, in conunction with the therapy, seems to be the reason for the increase in scores, thus, helping the patient in the battle against the progression of the disease.  Yet another thing that can be deduced from our testing is the type of questions that Alzheimer's patients can accurately handle. Thus, from this data, we were able to figure out, firsthand, the effects of the disease on the patients. The questions that most of the patients (excluding the ones that could not answer any) were able to successfully obey most of the commands. Examples of this are repeating phrases or naming objects. The types of questions that they especially had problems with were those that had to do with remembering things that are constantly changing or things that they had to remember (short or long term). Thus, if the question did not relate to something that was happening at that precise time, the patient had a much harder time answering it.  This idea, which was prevalent both times that we administered the test, supports the fact that AD does, indeed, impair memory. The questions that could not be answered consistantly indicate that the disease had already impaired those tasks targeted by that questions. Yet, the questions that could be answered consistantly are the types of functions that threrapy and interaction must have helped, for they were also answered correctly (or even better) the second time the test was administered. If these questions were not answered successfully the second time, we would have known that the AD had dramatically progressed into a worse stage of the disease. Yet, since they did not, we can again make the conclusion that there was little or no further progression of the disease in the patients.  Perhaps there were too many outside factors which came into effect, which were by far out of our control. Their different ages and stages in the disease are important factors. Or the time of day or number of times we met with them also played a significant part. It was often hard to catch them at a good time, as they woke up late and went to bed early. It is often hard to come up with hard and solid numbers and data when working with people subjects and such personal issues like Alzheimer�s. These people, whether they know it or not, are at an extremely hard point in their life. Maybe our research did no more good than to bring a brief smile to their face or pleasure them with a genuine conversation, but at this point and time, in the continuous research being done to find the motives of or cure for Alzheimer�s, the best thing we can do for the sufferers is to try to make their last years here with us happy. |

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