

Inequality and the Patch

By Julia Adams

Some years ago, there was a little girl with thick glasses with pink frames, often smudged with finger prints and crooked from careless use. She also wore a patch, quite like a pirate's. She wore this patch, not for a costume party for Halloween and not because she particularly admired Captain Hook or felt inspired by Disney's "Pirate's of the Caribbean" ride. She took it off whenever she could. It was uncomfortable. It messed up her hair, rubbed against her sensitive skin, and limited her to the use of one eye. But her mother insisted.

So she hid. She hid herself. She hid the patch. Screaming and tantrums were not an uncommon phenomenon at her house, particularly after she had to wear the patch in her portrait for pre-school. Threatening television privileges was the only way to control her, if only for a little while. Her mother employed every tool she could. She carried the child on her back to ensure she kept the patch on and never left her alone. If any of her other children said one word about the patch, there would be consequences; words she said in such a scary voice that there never had to be. As such for as far as memory serves, the girl was not bullied at pre-school for her patch. Most likely if it had happened, the same screaming skills that so irked her mother would be deployed against a new foe. She just hated the patch with the kind of absolute passion and abandon that belongs to children, who have difficulty maintaining two different emotions at once. Yet through the power of her mother's persistence and to embrace the cliché, love, she wore the patch. Her time under the tyranny of the patch turned into random childhood anecdote to liven up boring party conversations and it was only later, when she began to question it. That little girl was me and this essay is the result of those ponderings, the kind that made everyone uncomfortable, when we're forced to consider how we came to be who we are and realized a great deal of it had nothing to do with our efforts, but the circumstances and people around us.

So, why was I, a little blonde girl with big glasses and knobby knees, forced to accessorize like a Bond villain? Strangely enough, it was for my own good. It was a short term cost designed to thwart long term consequences. I had amblyopia, a condition that is best, if a bit randomly, explained through an old Buddhist axiom: see the problem, seek the cause, find the cure and apply the remedy. The problem of amblyopia can be easily seen; it is commonly the result of strabismus or having a "lazy eye." Otherwise many cases are caught by parents catching their children squinting and school visual screenings. The cause is known as well. Amblyopia is the condition when the brain receives a different image from each eye. The brain naturally chooses the clearer image, one eye grows to be dominant, and the image from the other eye is suppressed, that eye becoming weaker.

There are two cures available: atropine drops and the aforementioned patch. They block out the image from the stronger eye, forcing the brain to use the weaker eye. As for applying the remedy, it varies depending on the age of the child and the severity of their visual problem, ranging from 2 to 12 hours of daily patching. According to a study evaluating the effectiveness

Comment [JA1]: This is the paragraph where I transition from my personal narrative to a lot of scientific stuff. Is there "tone whiplash"? As much as I would love to keep up the humorous tone in the beginning, I think it's inappropriate for the content so I just want to ensure this is a smooth transition not only of content but of tone.

of treatment executed in Sweden, as little as two hours a day of patching can be effective in helping children with amblyopia (Lithander, Sjorstand 111). I had acute amblyopia, as a result, two hours was not satisfactory. However, patching was not always as radical as what I experienced. There is one catch to this whole process – amblyopia is best resolved before age 8, which is a nice way of saying that it is often permanent if not treated before then. Children with untreated amblyopia lose vision acuity in their weaker eye and some stop using that weaker eye all together, driving that eye blind and causing damage to their vision as a whole. They are also more likely to lose all their vision by accidentally injuring their good eye. Luckily, there is a cure. With treatment, any child with amblyopia can live a normal life.

However, real life is more complex. The problem is seen. The cause has been sought. The cure has been found. Yet, the remedy is not evenly applied. There are adults who have amblyopia; they are the children who missed the cut-off, whose condition was not resolved in time. So researchers start the process once again, seeing the problem, seeking the cause, finding the cure and applying the remedy. There are studies on the best time to screen children; the younger the better. There are studies on whether the patch or atropine drops are most effective. There are studies trying to reverse amblyopia in adults with the latest technology. However, all these studies ignore the true cause, a cause that isn't medical or scientific. There is no cure for, no way to patch away human nature and inequality.

The most common reason why amblyopia is not cured is noncompliance with treatment, failure to follow the doctor's orders (Lithander, Sjostrand, 111). As shown by my own experience, parents are determinant factor in whether or not treatment is complied with. There are a number of explanations given as to why families don't comply. Researchers discovered that these reasons differed according to income. Lower income families are said not to comply because of children's resistance, allergic reactions, and cost of the patch and higher income families complained of short physician contact time and appointment difficulties (Leenheer, et al, 6). These reasons reflect how amblyopia treatment, like so many other things, is experienced differently by upper class families and higher class families. I have to wonder if the reason why lower income families are not so concerned with physician contact and appointments is that they don't have adequate health insurance. However, the difficulties, perhaps other than patch cost, described here can be surmounted or at least endured.

My mother endured what researchers call "child removing patch" certainly. I would say these are merely explanations for why families do not comply. The reasons are more complicated.

In some ways, it's not just about the money but it is all about the money. If you can afford doctor's visits and patches, patching is certainly a less stressful experience. Yet, I would think that if you are forced to sacrifice scarce resources for a patch, you would be more likely to use it. Children from middle and upper class families, nonetheless, are more likely to have their conditions resolved than children from lower class families. "Poverty predicts amblyopic treatment failure", as goes the title of an article from *The American Journal of Ophthalmology* (Hudak, Magoon, 214). These researchers from Ohio rally up a number of statistics from their study to prove their point. They compare the results of children with amblyopia receiving Medicaid and those with amblyopia, not receiving Medicaid. "The likelihood for a good final

Comment [JA2]: Does this transition and these paragraphs effectively convey the following: amblyopia is not always cured, it is not always cured because people don't comply, lower class people are less likely to comply, their children are more likely not be cured. I want to make sure my argument doesn't leave people in the dust.

visual acuity was 26.8% for the group receiving Medicaid and 58.4% for the group not receiving it" (Hudak, Magoon, 214). Even worse, "the likelihood of a poor final visual acuity was 33.8% in the Medicaid group versus 11.5% in the non-Medicaid group" (Hudak, Magoon) All this totals up to is that children who are better off are more than twice as likely to have successful results due to treatment and those who are poor are three times as likely to have bad results, despite treatment. (This study does not seem to account for those who are poor but not poor enough to receive Medicaid). The disparity shown here is reflected in a study comparing why high income parents and low income parents don't comply; Researchers found that higher income parents were more consistent 42% to 28% and more likely understand the treatment more 46% to 8% as compared to lower income parents(Leenheer et. all, 6). Class, non-compliance and thereby failure of amblyopic treatment are correlated but why?

It's easy to say that the reason for the inequality in success rates for amblyopia is that lower income families do not have the money for patches, drops and doctor's visits. I would argue however that the problem is more complicated than that. In order to do so, I have to abandon the research articles and scientific facts and talk more of my own personal experience. My mother, who persevered so nobly on my behalf, was an educated stay-at-home mom. My father was a lawyer for the state. We certainly weren't the 1%, but we had insurance and were comfortably middle class. Because of my mother's education, she understood the risks. We also had the benefit of my father's experience; he had the same condition and didn't wear the patch as much as prescribed, causing lifelong depth perception problems, which manifest themselves in dents on his car and "moving" parking garage posts. My mother also had the time and the determination to be persistent as afforded to her being a stay-at-home mom. It is hard to discipline children after a long day at work about anything, let alone about a pirate patch. I'm sure I'm not the only one who is less likely to do something if I don't understand why. Not to mention, the patch is to stave off a long-term problem but these families and parents (often single parents) often have more immediate concerns such as rent. Many of these parents are young themselves. My mother experienced this divide firsthand, when she started teaching in a poor area of Lansing and met children who weren't as lucky as I was and parents full of regret.

Class is created by a society. It is the result of how resources are distributed and how the distribution of resources affects people. Children from lower class families are already disadvantaged, but when they have amblyopia, their disadvantages start to accumulate and affect each other. The median income for someone with a moderate disability in the U.S.A is 22,000 dollars, 3,000 dollars less than for those without disabilities (Gibson). Following this logic, poor children with amblyopia grow into adults with amblyopia, who then have poor children with amblyopia and the cycle continues. It is easy to talk about how assistance to the poor costs money, a short term setback just like the patch, but there are long term benefits. If compassion is not moving enough, Gibson estimates that 23 billion is lost annually from the income adults with amblyopia could have made and could have paid taxes on (Gibson.) Therefore, government investment in programs that promote awareness, understanding and methods for increasing compliance would not be a deterrent in taxes but a long-term solution to help low income families.

However, as I said earlier it's not just about money, money in taxes or money spent on public initiatives, because the real world is too complex for such a simple remedy to be effective. As fond as I am of that old Buddhism axiom, I find it more and more insufficient. We see the problem of unequal treatment for amblyopia. We seek the cause and find it to be reflective of poverty, of the greater disparity between rich and poor. As such, we try to find a cure but how can we cure more children with amblyopia if it's not a medical issue, but a societal one? We are lead down a rabbit hole, we now see the problem of a growing gap between the upper and lower class and now seek the cause, which is not as straight-forward as a medical explanation for amblyopia. Such simplistic renderings are corrupted by real life, twisted such that they can't follow the simple lines of logic. As a result of greater societal ills, the class system, children are literally doomed to be half-blind for the rest of their lives. It is up to adults to find long-term solutions, and absorb short term costs. It is up to adults to take responsibility for the costs of our societal system that has more far-reaching impacts than realized. For, after all, we are not children. Children don't think of the future. Children don't appreciate taking a cost now for benefits later. Children don't question the world they live in; any system they are born into is normal. Children don't understand that sometimes the reason for something and the explanation are two different things. Children don't realize that sometimes adults aren't in control, aren't able to do their best, and need help. Children hide their patches, runaway, deny they need them and throw fits, but it is up to adults to put them back on. As a society, we must all look to the results of inequality and try to find whatever long-term solutions we can and tolerate short term costs. Since, it's hard to look ahead to the future, if one is half blind with no depth perception.

Comment [JA3]: In this paragraph, I sought to unite some disparate "themes" that have been floating around in this paper. The talk about childhood in the beginning, the inequality thread, the Buddhist stuff. Moreover, I wanted to talk about inequality without being preachy yet I still wanted to be strong and convincing. So do my intentions match my effect/execution?