

---

# Medicating autism: Factors affecting the decision of parents regarding the use of psychotropic medicine for their children diagnosed with autism

John Robert Rilveria

University of the Philippines Diliman

© 2017. Psychreg Journal of Psychology  
ISSN: 2515-138X

---

This paper utilised a sequential explanatory mixed-methods design comparing the experiences of 17 parents who use; and 23 parents who do not use psychotropic medicine for their children diagnosed with autism. The main objective is to identify the factors influencing their decision-making process. Quantitative analyses revealed that attitude towards treatment significantly differentiates parents who use (with more positive attitude levels) and parents who do not use (with more negative attitude levels) prescribed medicines. Furthermore, treatment attitude has been found to have significant association with three treatment decision variables. There was a low negative correlation with treatment cost and a high positive correlation with treatment belief and perceived behaviour severity. In the qualitative analysis, six factors were identified that influenced parents' decision to use or not to use medicine: (1) perceived mental health condition; (2) perception towards autism diagnosis; (3) doctor's prescription and recommendation; (4) beliefs and attitudes towards treatment; (5) perceived necessity and expectation of treatment decision which include perceived improvement of the child (from parents who decided to have both therapy and medication and from parents who decided to have only therapy); and, (6) the problems encountered. Integrating both the quantitative and qualitative data led to the formulation of a treatment decision model that explains the interaction of five major variables (child, parent, doctor, decision, and treatment) in the decision-making process from which the parent variable, specifically perception and beliefs towards treatment directs the decision to use on not to use such treatment.

Keywords: autism, decision-making, psychotropic medicine, treatment attitude, treatment decision

Correspondence: [jcrilveria@up.edu.ph](mailto:jcrilveria@up.edu.ph)

## BACKGROUND

Based on the recent data released by the Centers for Disease Control and Prevention (CDC) in the US, the reported cases of autism spectrum disorder (ASD) worldwide rose at an alarming rate from an estimated 1 case in every 1,000 children during 1980, to 1 in 110 last 2008, to 1 in 68 in 2010 (CDC, 2014). In the Philippines, from approximately half million reported cases last 2008, there were already more or less 1,000,000 people with ASD in 2014, doubling the figure (Jaymalin, 2014). This made ASD as the third most prevalent neurodevelopmental disorder – with cerebral palsy and intellectual disability as second and first, respectively in the country (as cited in Carandang, 2011).

Children diagnosed with ASD are characterised by a clinical tetrad of symptomatology: lack of socio-emotional recognition, deficits in verbal communication, presence of sensory problems and manifestation of restrictive-repetitive behaviours (American Psychiatric Association, 2013). Because of this range of symptoms, various therapeutic interventions and treatment modalities are being used to treat and manage autism. While behavioural interventions (special education, speech therapy, occupational therapy, etc.) are undeniably the first line of choice for parents and therapists to effectively facilitate learning and communication of children with autism, there is a great need for pharmacological interventions (psychotropic medicines like sertraline, fluoxetine, risperidone, methylphenidate, aripiprazole, etc.) to address severe problem behaviours such as aggression, hyperactivity-impulsivity, incontinence, tantrums, sleep problems, pica, verbal self-stimulatory behaviours, rituals and compulsions that interfere with educational and emotional growth of the child and endanger his, as well as others', safety (Filipek, Steinberg-Epstein, & Book, 2006; Rosenberg, Mandell, Farmer, Law, Marvin, & Law, 2010). However, not all parents prefer nor even consider using medicines for their children. Those factors that underlie their decisions to use or not to use medicine (especially in the Philippine context) for their children with autism became the focus of the entire research study.

The general research enquiry is the decision-making process, and identifying the factors that influence and/or contribute to the decisions of parents – to use or not to use psychotropic medicine for their children with autism. To address this, specific research questions were initially investigated: (1) What is the level of treatment attitude of parents who use psychotropic medicine and those who do not? (2) What are the variables associated with treatment attitude? (3) What are the reported experiences of parents who decided to use, and parents who decided not to use medicine for their children?

There is not much research that specifically identifies the sequential decision-making of parents when deciding to use or not to use medicine for their children. Previous works only pinpointed variables affecting decisions but the degree to which each variable contributes to the decisions and which variable has the most impact on decisions were not thoroughly investigated.

Moreover, these findings focused on the factors that contributed to the decisions of parents who only used the prescribed medications. There were not much studies enquiring about the perspectives of parents who decided not to use medicine. Additionally, the consequence of the decision and treatment satisfaction have not been put into question as to how they would affect future decisions to continue using or remain not using medicine for their children.

Therefore, this research sought to provide a comprehensive decision-making framework regarding the use of psychotropic medicine that parents face. The established decision-making framework did not end on the final decision to use medicine or not but was extended to the several consequences upon acting on the decision. The output of this research can be used as an informative decision aid whether to use

medication or not and this model can provide potential information for further research about assessment of prescribed medications and treatment decision.

### What is psychotropic medicine?

A psychotropic drug/medicine (also known as psychoactive drug) is a chemical substance that operates upon the central nervous system where it alters brain functioning, resulting in relatively temporary changes in perception, mood, consciousness and behaviour (AskDefine, 2017). Such medicine is usually prescribed by a developmental paediatrician or any of the child's primary physicians. The type of medicine, its potency and dosage vary across cases. They depend on the target symptoms being treated, the child's age and weight, general health and physiological response to the medicine (Autism Speaks, 2012). Primarily, psychotropic medicines are not used to treat autism per se, but are used to address the problem behaviours of a child, usually with a neurodevelopmental disorder like autism.

### Problem behaviours as the target symptoms

Autism does not cause those problem behaviours exhibited by the child. The behaviours may be a product of just the symptoms of autism (like deficits in verbal communication would result in a child engaging in behaviours when he tries to communicate, or sensory processing problems would lead a child to behave in way that would stimulate his senses) and not the disorder itself (Autism Speaks, 2012). These behaviours are then shaped or learned from the environment as a result of being reinforced, tolerated, or punished. Either way, without proper and early intervention, these behaviours worsen and become even more problematic not just for the child but for other people as well.

In the Challenging Behavior Tool Kit prepared by Autism Speaks (2012), they identified some of the problem behaviours displayed by children with autism such as: aggression (property destruction, self-injury, physically harming others), hyperactivity-impulsivity (non-stop running, jumping, climbing everywhere), incontinence, tantrums and meltdowns (emotional outbursts that involve crying, yelling, screaming, hitting, etc.), sleep problems (inconsistent or unusual sleeping patterns), pica (eating inedible objects), verbal self-stimulatory behaviours, rituals and compulsions. These are called problematic or challenging because they impair social relationships, inflict physical and even emotional pain to self and others and interrupt academic learning. Thus, when any of these or a combination of these problematic behaviours is present, doctors would advise treatment through medication to manage the behaviours.

### Common psychotropic medications for autism symptoms

There is no known medication that can cure autism but there are different types of drugs used to treat specific behavioural disturbances and symptoms of autism. Two known antipsychotic drugs are being used and prescribed: risperidone (Risperdal) and aripiprazole (Abilify) were approved by the US Food and Drug Administration (FDA) for the treatment of irritability which includes aggression, temper tantrums, and self-injury in children adolescents (ages 5 to 16) with autism spectrum disorder (Covey, 2013; Siegel & Beaulieu, 2012).

Selective serotonin reuptake inhibitors (SSRIs) or more commonly called as antidepressants are also used for children with autism. The popular ones are fluoxetine (Prozac) and sertraline (Zoloft). They are FDA-approved to be effective in treating anxiety, depression and obsessive-compulsive disorder (OCD) symptoms for children with autism with ages 7 years and above. Other currently used medications are stimulants like methylphenidate (Ritalin). However, this is only approved by the FDA to treat patients with Attention deficit hyperactivity disorder (ADHD). Thus, it is used as an 'off-label' i.e., there is no approved effect on ADHD symptoms for children with autism. Nevertheless, it is legal and doctors prescribe methylphenidate because they are proven to be effective in decreasing hyperactivity and

impulsivity of children with high-functioning autism (National Institute of Mental Health, 2015; Newsmax, 2011; Oswald & Sonenklar, 2007; Siegel & Beaulieu, 2012).

### Parental decision to use psychotropic medicine for their child

When doctors prescribe or suggest the use of psychotropic medications for the child, a host of factors are being considered by parents before deciding whether to follow the doctor's prescription/recommendation, or not. Obviously, the parent would think of first the welfare of the child. The parent would eventually consider the severity of the disability and the degree of behaviour problems whether they really necessitate medications. The more severe or challenging the behaviour is (especially if there are associated disorders other than autism like ADHD, depression, OCD, etc.), the more likely will parents seek medication to address these behaviours (Frazier et al., 2011; Hall, 2011; Schall, 2003). Moreover, parents' socioeconomic and educational levels were found to be predictive of treatment use. Parents who attained a graduate level degree are more likely to report use of treatments for autism than those who attained education at technical schools or college levels (Hall, 2011). On the other hand, poverty, illiteracy and inability to afford medication cost greatly affect the willingness to buy and use the medicine (World Health Organization, 2003). Familiarity with autism and its treatment is also crucial. Parents or care providers who have a substantial knowledge about the condition and the treatment procedure are said to be better equipped in handling and managing problem behaviours thus know when it is necessary to use medicine for the child (Logan, 2013). In terms of beliefs and attitude towards treatment, adherence to medication is greater and medication is more likely to be continued by parents who felt that the symptoms of their child have been improved through the medication but adherence is transformed into doubt when parents start to worry about their child's health not being positively responsive to the medication (Nagae, Nakane, Honda, Ozawa, & Hanada, 2015; WHO, 2003).

Integrating several research studies, treatment decision (i.e. decision to use medicine) is influenced by three major factors: (1) treatment variable (cost, accessibility, effectiveness); (2) parent/family variable (personal beliefs, treatment acceptability, socioeconomic status, knowledge about treatment); and, (3) child variable (severity of problem behaviour, physiological response to medicine).

### METHOD

A sequential explanatory mixed-methods design was utilised to establish a comprehensive framework that can explain the decision-making process of parents regarding the use of psychotropic medicine for their children. This research was divided into two parts: a quantitative followed by a qualitative approach. The quantitative part made use of a survey as a data gathering tool. It measured the respondents' attitude towards the use of psychotropic medicine and the factors associated with it. This answered the first and specific research questions. The survey also served as a screening tool for the respondents' identification either as a parent who uses medicine or as a parent who does not. The former who scored greatly above average and the latter who scored greatly below average were invited for a semi-structured interview. This was the qualitative section and data gathered from the interview were used to answer the third specific research question. Integration of the quantitative and qualitative data led to the formulation of a decision-making framework.

### Sample

The study has 40 participants. There were 17 parents who reported using prescribed medicine for their children while 23 parents reported not using and not in favour of using such medicines. They were selected via purposive sampling. Selection criteria included: Filipino parents of children diagnosed with autism currently enrolled in a therapy or special education centre and residing within Metro Manila all of whom were given recommendations or prescriptions from the doctor to use medicine for their children. Out of the 40 parents, 8 were asked to participate in an interview. They were selected based on

their treatment attitude scores. Four parents who use psychotropic medicine and scored higher than the 90<sup>th</sup> percentile and another four parents who do not use psychotropic medicine and whose scores were at the 10<sup>th</sup> percentile and below became the interviewees.

### Measures

The quantitative part made use of two scales. One of which is a test consists of selected items sourced out from the Behavior Intervention Rating Scale (BIRS; Elliott & Treuting, 1991). It assesses treatment acceptability and treatment effectiveness as subsets of overall treatment attitude. For this research, the overall treatment attitude was the measure in focus. From the original 24 items, only 15 were used in the administration of the scale. Retention and deletion of items were based on the factor analyses using oblique rotation as provided in the scale's psychometric properties. The second scale is a Treatment Decision Factors, developed by the researcher. It identifies four major variables (with two items each) in affection decisions to adhere to treatment. Both scales were in a 6-point Likert format.

### Psychometric properties

The construct validity of the BIRS may be evaluated in terms of the theoretical assumption made by Elliot and Treuting (1991) in their development of the scales as they statistically identified the elements of treatment attitude as treatment acceptability and effectiveness. They wanted to target consumer's attitude towards treatment. The selected items used in BIRS were still of high construct validity because among the 15 items from treatment acceptability domain, eight items which yielded high Pearson correlation coefficient (0.79–1.0) were retained while the remaining seven which yielded less (0.58–0.97) and two items were deleted due to very low coefficient values (0.16–0.17).

The BIRS also yielded a relatively great predictive validity as the parents who scored very high on treatment attitude reported positive experiences in their use of medicine in the subsequent interview part of the research. Likewise, those who scored very low shared their negative perceptions and ambivalence towards psychotropic medicine, justifying their decisions not to use.

The validity of the Treatment Decision Factors scale cannot be established because it consists of items created by the researcher with the aim of assessing the factors affecting treatment decisions which are treatment cost, treatment knowledge, treatment beliefs and behaviour severity. These predetermined factors were drawn from the literature and other research findings identifying the factors related to decision whether to use or not to use medication treatment.

To check for reliability, inter-item correlation was done to determine relationship among each item under each domain to see if they yield consistent results. In the acceptability domain, all the eight items yielded significantly high positive correlation coefficients (ranging from .80 – .90). For the effectiveness domain, all items yielded significantly high positive correlation. Six items ranged from moderate to high coefficients (.28 – .45). Nevertheless, the internal consistency of all the items as measured in Cronbach's alpha was .98, which is really a high degree of internal consistency which implies that the set of 15 items are closely related to each other thus measuring relatively the same construct that is attitude.

On the other hand, for the qualitative part, the researcher used an interview guide. It consists of five general questions with corresponding follow-up or probe questions each. The first question was intended to gather information about the acknowledgement of the problem of the child, the diagnosis and the emotions and cognitions attached to it. The second question was about parents' awareness and knowledge about psychotropic medicine and their stance regarding its use for autism. The third question was a confirmatory whether they use such medication for their children or not. For parents

who use, a probe question seeks to find out the type of drug used, the length of drug use and the perceived effect of the drug. The fourth question focused on the reasons as to why parents decided to use or not to use psychotropic medicine for their children. The experiences (thoughts, emotions and people involved) that the parents have gone through or have encountered before deciding was also probed. Lastly, the fifth question tackled on the consequence of the decision and future course of action regarding the matter whether they will continue to use or still remain not using medicine for their children.

### Conceptual definitions

*Treatment decision* refers to the cognitive process of selecting from possible options (ascribing to treatment recommendation or not) leading to a course of action (using medicine or not). Theoretically, treatment decision can be predicted in terms of treatment attitude. *Treatment attitude* refers to one's personal opinion (positive or negative) and preference towards treatment. Treatment attitude is divided into two elements: (i) treatment acceptability which refers to how favourable and acceptable the treatment is in terms of dosage, procedures, maintenance and effect; and, (ii) treatment effectiveness which refers to the perceived effect of the treatment (both beneficial and negative side effects) on the target behaviour or symptoms and the perceived improvement on the child's general well-being.

### Operational definitions

Based on the Behavior Intervention Rating Scale, the higher the overall score, the more positive the attitude towards treatment is. Conversely, the lower the overall score means a negative attitude towards treatment. Scores ranging from 0 –2.88 indicate low treatment attitude while score higher than 2.89 indicate high treatment attitude. Moreover, there are four factors affecting treatment decision: (1) treatment cost refers to the idea that the expensive cost of treatment affect attitude towards it. A score higher than 3.02, indicates the parent's ambivalence in using medicine, solely due to its cost. (2) Treatment knowledge refers to awareness of both the positive and negative side effects of the treatment. A score higher than 3.65, indicates very high awareness of the effects of treatment. (3) Treatment belief refers to the perceived consequence of using the treatment. One is a positive belief favouring treatment that the child would become unproductive without treatment (very strong positive belief is indicated by a score higher than 4.175). (4) Behaviour severity refers to the necessity for treatment depending on how intense and how frequent the behaviour is. Scores higher than 2.6, indicate that there is a higher chance of using treatment due to the frequency and intensity of the child's problem behaviour.

### Analysis of data

Results from the completed scales were analysed using SPSS. Treatment attitude scores were grouped into two: (i) scores of parents who use psychotropic medicines and, (ii) scores of parents who do not use. Standard descriptive statistics was initially established to create a summary of the mean scores in each treatment attitude domain and each treatment decision factor from the scale. Inferential statistics was then used to find statistical significance in the difference between parents who use and parents who do not used medicine for their children. In terms of the overall score in the treatment attitude, significant differences between the two groups were tested through independent samples t-test.

Scores in each of the five factors in the second scale were correlated with treatment attitude scores through Pearson product-moment correlation to determine any variables possibly associated with attitude toward treatment.

The quantitative analysis was further validated and expounded from the interview. Through thematic analysis, responses from the interview were grouped into common categories that surfaced the decision-making experience.

Quantitative data

Summary of the descriptive statistics of the survey results were as follows: Among 40 parents who responded to the survey, the average treatment attitude scores ranged from 1.13 – 5.40 with a mean score of 2.98 (as shown in Figure 1) and a standard deviation of 1.52. A score higher than the mean score implies high treatment attitude which were actually the attitude levels of parents who use medicine while a score lower than the said mean suggests a low treatment attitude which were in turn the attitude scores of parents who do not use medicine.

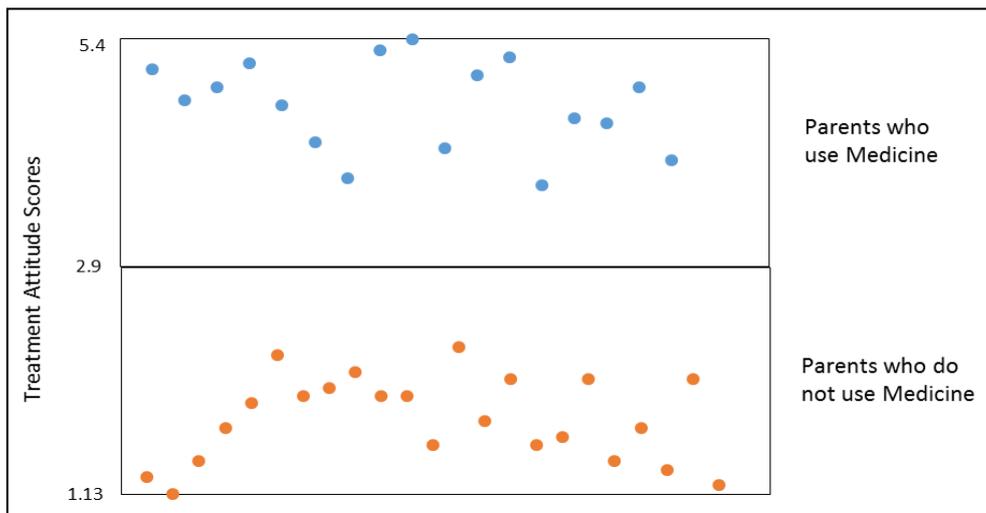


Figure 1. Scatterplot of the Individual Treatment Attitude Scores of parents who use Medicine (n = 17) and parents who do not use medicine (n = 23).

The mean attitude score of parents who use medicine was 4.67 and the mean attitude score of parents who do not use medicine was 1.74. The marginal difference is 2.93. This showed statistical significance based on the independent samples t-test,  $t(38) = 21.9, p < .05$  (refer to Table 1). To determine factors associated with treatment attitude, correlation was tested in each of the factors. The first target factor is treatment cost. The first 23 respondents were parents who do not use medicine and succeeding values were from parents who use medicine. Treatment attitude increases from the former to the latter and treatment cost seem to decrease at slight degrees. To test the statistical significance of this relationship between treatment attitude and treatment cost, Pearson correlation was used. Significant association was found between treatment attitude and treatment cost,  $r = -.35, p < .05$ . Negative but low correlation indicates that negative treatment attitudes are influenced by the expensive cost of the treatment.

Table 1  
 Independent Samples t-test Between the Attitude Levels of Parents Who Use Medicine (n = 17) and Parents Who Do Not Use Medicine (n = 23)

	Parents who use Medicine		Parents who do not use Medicine		t-test
	M	SD	M	SD	
Treatment Attitude	4.6706	0.4963	1.742	0.35007	21.907**

\*\*p < .01

The second factor is treatment knowledge. With increasing treatment attitude, treatment knowledge varies irregularly. Pearson correlation identified no significant association between treatment knowledge and treatment attitude,  $r = .08$ ,  $p > .05$  (refer to Table 2). Thus, being aware of the beneficial and negative side effects of the treatment does not influence one's attitude towards it.

The third factor is treatment belief which was divided into positive and negative belief about treatment. In terms of positive treatment belief, there seems to be an overall increasing trend with respect to treatment attitude. There is a statistically significant association between treatment attitude and positive treatment belief whereby the more positive the attitude is towards the treatment, the more likely is the parent going to believe that the medication would make the child more productive; a positive correlation was established,  $r = .83$ ,  $p > .05$ . When tested for correlation, no statistically significant association between treatment attitude and treatment belief was found,  $r = -.27$ ,  $p > .05$ . Regardless of the attitude towards treatment, both parents who use and parent who do not use treatment have negative biases against medication as a form of treatment.

The last factor is behaviour severity, which has a positive trend from parents who do not use medicine. There is a statistically significant association between behaviour severity factor and treatment attitude levels,  $r = .91$ ,  $p < .05$ . This strong positive correlation indicates that the more parents perceive the need for treatment due to severity of their child's problem behaviour, the more positive their attitude toward treatment would be.

Table 2  
Pearson Product-Moment Correlations of Treatment Factors with Treatment Attitude

Factors	Treatment Attitude
Treatment Cost	-0.353*
Treatment Knowledge	0.079
Treatment (+) Belief	0.830**
Treatment (-) Belief	-0.267
Behavior Severity	0.914**

\* $p < .05$

\*\* $p < .01$

### Qualitative data

Thematic analysis revealed six distinct categories from the parents' reported experiences. These categories were factors that led to their decision to use or not to use prescribed medication for their children. There were five major factors identified that shaped parents' decision to use or not to use medicine. The sixth factor was a resultant of the whole decision and a contributor to further decision-making regarding the said medication after it was used or not used.

### DISCUSSION AND INTERPRETATION

In the quantitative analyses, there was a clear distinction between the levels of treatment attitude between parents who use medicine and parents who do not use medicine. Statistical significance of the difference between the two groups validates that treatment can be used to characterise and describe the two groups. A high treatment attitude level which means positive attitude towards treatment is a characteristic of parents who use medicine. Thus, treatment attitude can be regarded as a possible determinant of treatment decision i.e. the higher the treatment attitude (more positive), the more likely are the parents going to decide to use medication for their children. There is one caveat, however, in the

Treatment Attitude Rating Scale, both parents (who use medicine and those who do not), were somewhat homogenous with their answers on the eleventh item (under the perceived effectiveness domain): *My child's behaviour will remain at an improved level even after treatment is discontinued*. Both groups clustered on lower scores (resulting in a very low correlation with other items in establishing the psychometric properties), which means they acknowledge the temporariness of the effect of medication.

Among the factors associated with treatment attitude, treatment cost, positive treatment belief and behaviour severity were found to have significant relationship with it. Data from the interviews also complemented the statistical data into the parents' personal reasons for deciding on using medicine, or not. These can explain why such relationships were established. Negative low correlation with treatment cost means that there is an inverse relationship with treatment attitude but only to a lesser extent. This is due to the fact that even if parents who do not use medicine reported that they admit the expensive cost and maintenance of treatment, it does not necessarily mean that they will not use medicine solely for that reason. There are other factors affecting their decision not to use medicine apart from treatment cost. Moreover, there has been no correlation of treatment attitude with treatment knowledge. Awareness of positive and negative effects of treatment does not account for their decision to use the medicine. This is mainly because of their biases and pre-existing beliefs about medication as treatment for autism that colour the objective fact about the effects of treatment. Even if they were advised by doctors, or if they have looked into the effects of the prescribed medicines themselves, they still cling into whatever they think and feel is appropriate for their children. Such beliefs about medication that influence treatment decision were clustered into positive – favouring the effects of medicine and negative – highlighting the possible tolerance and dependence on medicine.

In terms of positive beliefs, positive correlation was found, which implies that parents who decided to use medicine believe that it is the only way to make the child productive; and that stopping the medication would make the child unproductive. Negative treatment belief did not provide a comparative negative correlation. Both groups of parents worry about the tendency for their child to become dependent on medicine if ever they use it. The behaviour of parents who were anxious about possible dependence on medicine but still decided to use it nonetheless may be attributed to the last factor: behaviour severity. It was found to be positively correlated with treatment attitude. The more they perceive the behaviour as problematic (in terms of frequency and intensity), the more likely they would prefer to use medicine.

Integrating both the quantitative and qualitative data arrived at a treatment decision framework that explains the decision-making process of the variables involved as shown in Figure 2. It presented five main variables: child, parent, and doctor, decision, and treatment variables. It starts with the child variable. The child has mental health condition that is perceived by the parent. In the parent variable, the parent recognises that mental health problem and acknowledges the need for possible intervention. So, the parent will decide to seek for professional help. In the doctor variable, the doctor will first assess the child and provide diagnosis but this should first be accepted by the parent before proceeding for further assessment. Upon approval of diagnosis, the doctor would give appropriate recommendations for treatment like therapy or possible medication depending on the child's condition. For severe problem behaviours, the doctor usually prescribes a psychotropic medicine that would suppress hyperactivity, alleviate irritability, improve focus, etc. Acceptance and adherence of parents regarding the prescribed medication will be based on three sub-factors: (i) personal beliefs; (ii) attitudes about treatment; and, (iii) the perception whether medication is really necessary. This will lead to the treatment decision of whether to ascribe to medication or not. The decision results in two possible consequences: experiencing effects of medication with therapy or therapy only for the changes in behaviour and improvement of the child's condition. Then the parent perceives any improvement on the child and will be re-evaluated by the doctor to see if medication is still needed. In this framework, there may be

external variables that contribute to the decision by everything still lies on the parents' beliefs, attitudes and perception about treatment and need for treatment whether to use the prescribed medication, or not.

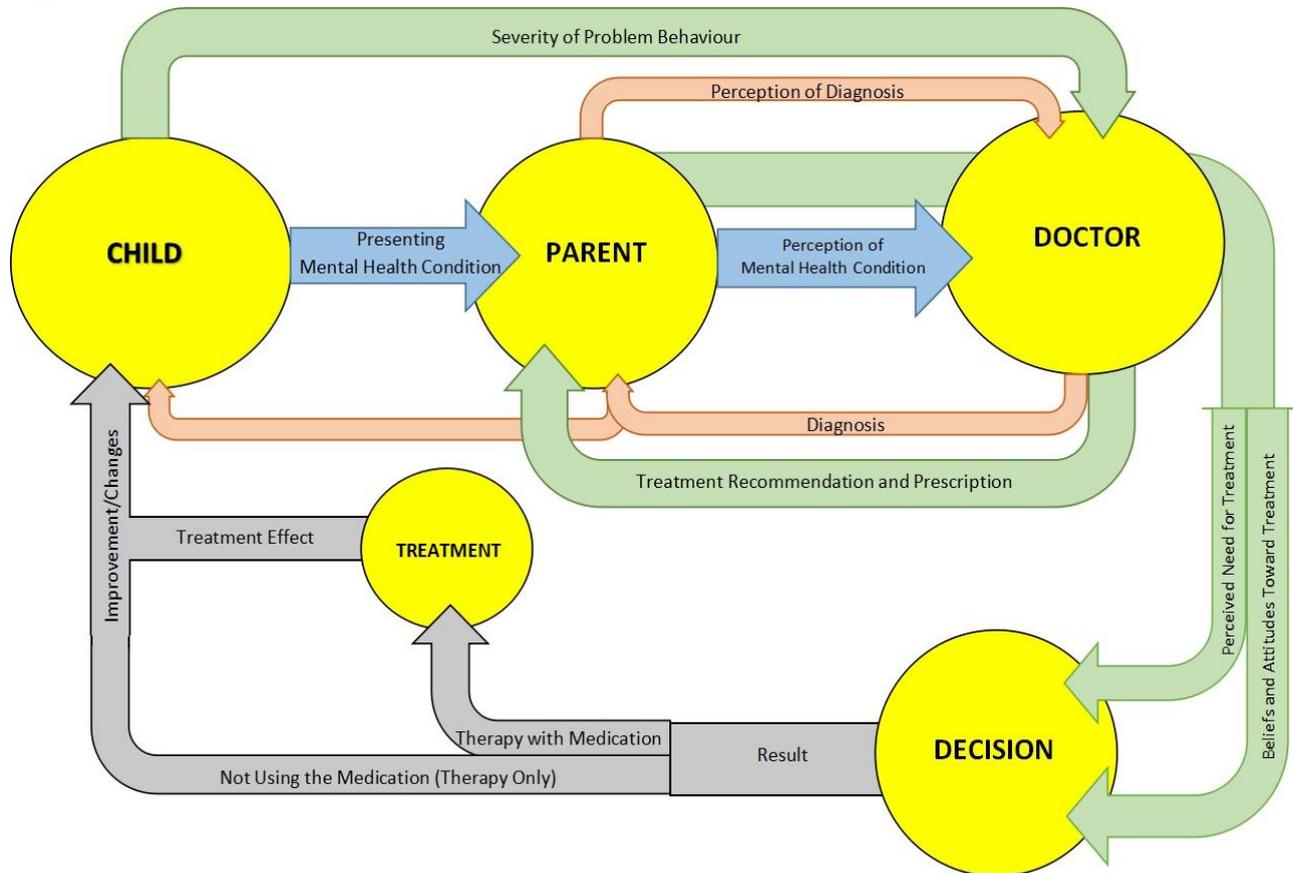


Figure 2. Decision Model Explaining the Factors Involved in the Decision-Making Process of Parents Regarding the Use of Prescribed Medicine.

### IMPLICATION

Parents who decided to use medicine have more positive attitude towards treatment believing that it would help in improving the child's condition and that it is needed for the child to become productive and well-functioning at other setting such as school. On the other hand, parents who do not use medicine have more negative attitude towards treatment primarily because of the perception that their child does not need medication and the personal belief that therapy alone can help improve their child's condition. Even with comparable levels of treatment attitude, both groups of parents agree that medication alone is not the key for the child's overall improvement. Both acknowledge that the effect of medicine is just temporary.

In the decision-making process, there may be factors such as child's problem behaviour and condition and the doctor's recommendation and prescription but the decision to use or not to use the prescribed medication lies entirely on the parents' perspective. No matter what the problem behaviour of the child is, if it is considered as tolerable and manageable by the parent, then there would be no reason to use medication. The parent is also wary of the possible negative side effects and dependence on treatment that is why it is not considered. However, if the parent wants to achieve some other ends like being able to participate in school with the belief that medicine could help, then the parent would follow the doctor's prescription.

The new decision to continue using or remain not using medicine still depends on the parents' perceived improvement of the child (after having therapy with medicine or having therapy alone) and further plans for the future of the child like schooling.

## CONCLUSION

This research focused on the use of psychotropic medicine for autism symptoms. There has already been a growing research about other forms of medication known as complementary and alternative medicine (CAM) such as nutritional supplements and vitamins which are, by far, less reactive, contains less chemical, and more natural than psychotropic medicines. There is actually one parent who does not use any prescribed medicine but uses 'cod liver oil' which basically helps in the digestion. Some studies assert that it unblocks neural pathways and retinoid receptors in brains of children with autism. There is also one parent who uses Propan TLC syrup, an appetite supplement for the child. The parent believes that in some way, it also helps in improving the child's condition. So, if parents do not conform to psychotropic medical prescriptions due to possible side effects then it would be interesting to know if these parents would be willing to use CAMs instead, especially if their decision to use is based on their own beliefs and attitudes towards it.

The treatment decision framework is somewhat generalist in the structure as it dwells on precipitating events that led to the decision and the underlying factors influencing the decision. Since the output of the research revealed beliefs, attitudes and perception about treatment as the primary contributors for decision to adhere to treatment, the future research can focus on the particular beliefs parents have about treatment and the sources of such beliefs as rooted from experience, personal biases, or existing knowledge.

Moreover, a longitudinal study can be done to assess the difference between therapy with medication treatment method, and therapy alone on the improvement of the child's condition so that the knowledge can serve as guideline for parents when deciding whether to use or not to use medicine.

Lastly, this study dwelled on the reported experiences of two groups of parents: parents who decided to use medicine and parent who did not use medicine. It would also be interesting to know about the experiences of parents who once used medicine for their child but are now not using medicine, and vice versa. These changes in decisions and the reasons behind them can provide useful and relevant information for determining how and why parents use or do not use medicine for their children.

---

## References

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Washington, DC: American Psychiatric Association.

AskDefine. (2017). *Define psychotropic*. Retrieved from <https://psychotropic.askdefine.com/>

Autism Speaks. (2012). Aggressive and challenging behaviors toolkit . Retrieved from [http://www.autismspeaks.org/sites/default/files/challenging\\_behaviors\\_tool\\_kit.pdf](http://www.autismspeaks.org/sites/default/files/challenging_behaviors_tool_kit.pdf)

Carandang, M. L. (2011). A Report on autism spectrum disorder in the Philippines. Retrieved from [http://www.nise.go.jp/kenshuka/josa/kankobutsu/pub\\_d/d-292/d-292\\_20.pdf](http://www.nise.go.jp/kenshuka/josa/kankobutsu/pub_d/d-292/d-292_20.pdf)

Centers for Disease Control and Prevention. (2014). Prevalence of autism spectrum disorder among children aged 8 years – Autism and developmental disabilities monitoring

- network, 11 Sites, United States, 2010. Retrieved from [http://www.cdc.gov/mmwr/preview/mmwrhtml/ss6302a1.htm?s\\_cid=ss6302a1\\_w](http://www.cdc.gov/mmwr/preview/mmwrhtml/ss6302a1.htm?s_cid=ss6302a1_w)
- Covey, L. (2013, February 12). Treating Autism Spectrum Disorder. *The Philippine Star*. Retrieved from <http://www.philstar.com/health-and-family/2013/02/12/907602/treating-autism-spectrum-disorder>
- Elliott, S. N., & Treuting, M. V. B. (1991). The Behavior Intervention Rating Scale: Development and validation of a pretreatment acceptability and effectiveness measure. *Journal of School Psychology, 29*(1), 43–51. [https://doi.org/10.1016/0022-4405\(91\)90014-i](https://doi.org/10.1016/0022-4405(91)90014-i)
- Filipek, P. A., Steinberg-epstein, R., & Book, T. M. (2006). Intervention for autistic spectrum disorders. *NeuroRx, 3*(2), 207–216. <https://doi.org/10.1016/j.nurx.2006.01.014>
- Frazier, T. W., Shattuck, P. T., Narendorf, S. C., Cooper, B. P., Wagner, M., & Spitznagel, E. L. (2011). Prevalence and correlates of psychotropic medication use in adolescents with an autism spectrum disorder with and without caregiver-reported attention-Deficit/Hyperactivity disorder. *Journal of Child and Adolescent Psychopharmacology, 21*(6), 571–579. <https://doi.org/10.1089/cap.2011.0057>
- Hall, S. E. (2011). *Factors affecting parents' decisions to treat their children with autism spectrum disorder with complementary and alternative treatments*(Order No. 3486097). Available from ProQuest Central; ProQuest Dissertations & Theses Global.
- Jaymalin, M. (2014, April 10). Number of people with autism increasing. *The Philippine Star*. Retrieved from <http://www.philstar.com/headlines/2014/04/10/1310840/number-people-autism-increasing>
- Logan, S. L. (2013). Psychopharmacotherapy use and adherence in autism spectrum disorders (Order No. 3574581). Available from ProQuest Dissertations & Theses Global.
- Nagae, M., Nakane, H., Honda, S., Ozawa, H. & Hanada H. (2015). Factors affecting medication adherence in children receiving outpatient pharmacotherapy and parental adherence. *Journal of Child and Adolescent Psychiatric Nursing, 28*(2), 109–17. <https://doi.org/10.1111/jcap.12113>
- National Institute of Mental Health. (2015). *Medications for autism*. Retrieved from <http://psychcentral.com/lib/medications-for-autism/>
- Newsmax (2011, January 12). 5 Top drugs for autism. Retrieved from <http://www.newsmax.com/FastFeatures/Drugs-medication-for-autism/2011/01/12/id/382640/>
- Oswald, D. P., & Sonenklar, N. A. (2007). Medication use among children with autism spectrum disorders. *Journal of Child and Adolescent Psychopharmacology, 17*(3), 348-55. <https://doi.org/10.1089/cap.2006.17303>
- Rosenberg, R. E., Mandell, D. S., Farmer, J. E., Law, J. K., Marvin, A. R., & Law, P. A. (2010). Psychotropic medication use among children with autism spectrum disorders enrolled in a national registry, 2007-2008. *Journal of Autism and Developmental Disorders, 40*(3), 342–51. <https://doi.org/10.1007/s10803-009-0878-1>
- Schall, C. M. (2003). *A descriptive study of parental reports and perceptions of psychotropic medication prevalence, patterns of use, and quality of services in autism spectrum*

*disorders* (Order No. 3080578). Available from ProQuest Dissertations & Theses Global.

Siegel, M., & Beaulieu, A. A. (2012). Psychotropic medications in children with autism spectrum disorders: A systematic review and synthesis for evidence-based practice. *Journal of Autism and Developmental Disorders*, 42(8), 1592-605. <https://doi.org/10.1007/s10803-011-1399-2>

World Health Organization. (2003). *Adherence to long-term therapies – Evidence for action*. Retrieved from <http://apps.who.int/medicinedocs/pdf/s4883e/s4883e.pdf>