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Parent-initiated Health and Education Services for Children with Autism in a Philippine Locality

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Abstract Autism requires individualized services to maximize full and effective participation in society. Legal mandates facilitate the coordination of health and education services for children with autism. Descriptive correlation was utilized to describe the health and education services initiated by the parents of children with autism in an urban locality in the Philippines, which has no legal framework for services specific to them. Likert-type questionnaires gathered data from purposively sampled respondents. There is selective utilization of health and education services for children with autism. The parent's number of children, income, and level of education significantly varied how they perceived educational programs and health services. Different aspects of educational services correlated with the availed health services. Accessibility and availability of health and educational services for these children must be improved. Further study on health and education services' impact on children with disabilities at different levels of education and health care system is needed.

Keywords: autism, health, education, correlation, parents

1. Introduction

Autism Spectrum Disorder (ASD) characterized deficits social social communication, interaction, and restricted repetitive behaviors, interests, and activities, was previously described as five distinct disorders (American Psychiatric Association, 2013). It has intertwined genetic, environment, neurobiologic causes (Guney & Iseri, 2013). 1 in 160 children worldwide has Autism Spectrum Disorder (WHO, 2019). Philippines has an estimated population of 500,000 cases out of 100 million (S.B. 1433, 2017). Unusual sensory-motor difficulties are observed with varied symptoms or patterns, gross and fine motor limitations impaired balance coordination, finger to opposition, poor speech articulation and social interaction can be observed by the parents or teachers by the time children go to school

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(APA, 2013; McPhillips, et.al, 2014; Azad & Mandel, 2016; Wozniak et al, 2017).

The evolving understanding of autism underscores the reality that no single method or intervention will meet all the needs of children with autism (Kasari, Sturm, & Shih, 2018). Thus, reiterating that the objectives of services for these children depend largely on the extent of the core deficits along social interaction, communication, and stereotypical behaviors.

The various dimensions such as language abilities and possible cognitive difficulties and the lack of expertise in assessment and diagnosis among some educational professionals reinforces the need for multidisciplinary perspectives in addressing the treatment goals for children with autism (Zwaigenbaum, L. Penner, M. 2018; Azad & Mandel, 2016).

The complexity of services for persons with disabilities framed and defined in a legal framework mandates vital screening services, special education and related services (IDEA, 2004; Australian Government Productivity Commission, 2019) are crucial for the

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identification and interventions for children with autism. A correct and prompt diagnosis then guides early intervention to better outcomes (Christensen et.al, 2019). Other countries mandated welfare services covering not just health and education but also employment, transportation among others (Hughes, 2010).

The reality, however, is that not many countries are able to enact legislation needed to mandate such services or even have the health care system and infrastructure in place to implement it. Parents of these children with autism are knowledgeable to some extent (Becerra et.al, 2009) to advocate (Boshoff et.al, 2018) for their children by initiating diagnosis and management. In the Philippines, current service packages for persons with disabilities (RA 10070 of 2009) have yet to include services specifically for those developmental disorders. This can explain why only 10% are diagnosed and 5 % of Filipinos with autism receive appropriate intervention (H.B. 6934, 2017). Further, services for children with autism generally depend on the offered services of private entities and local government health units. The parents have to navigate through the existing fragmented and uncoordinated services to avail of the services they think their child with autism needs.

The study aimed to describe how the parent-initiated health and educational services are related to each other in the context where the said services are mostly unguided by the existing healthcare and education system, wherein there is no presence of case manager or social worker conducting case monitoring and management in a Philippine urban locality.

2. Conceptual framework

Roger's concept of symphonic human and environment field interaction towards maximum health potential (Berman& Kozier, 2012), and, the Illness-Wellness continuum model (Travis, 1972, as cited by Berman& Kozier,2012) became the basis for the study's conceptual framework proposed Model of Services for Wellness Promotion of persons with disabilities. The parents' health-seeking behaviors for their child with autism are guided by the symptoms they see and whatever available and accessible health and education services in the area. Further, the said services can impact the child with autism state of wellness. The researcher proposed that interaction between health services and education services creates several modifiable environmental fields crucial to the child. The resulting milieu then affects the human functioning to both thrive and improve towards wellness or regress towards the state of disability.

Availing health services towards wellness that intersects with educational services promoting a supportive learning environment may result in bigger milieu promoting improved functioning for persons with disabilities. On the other hand, absence or untimely and ineffective utilization and of health and educational services resulting milieu can lead to further disability or dysfunction.

3. Methodology

This study utilized the descriptive correlational method. The 34 respondents were determined utilizing purposive sampling based on the following criteria: parents' children with autism who have been receiving educational and health services.

Researcher-made self-report tool was utilized as a data gathering instrument. The first part elicited the demographic data of the parents' children with autism. The second part consists of 65 items in a Likert type questions questionnaire. 10 separately determined the availed health services and availed education programs. Education services in terms of rendered objectives, strategies & methods, and resources for children with autism were respectively set at 15 items each. The data gathering tool underwent prior content validation. It also got Cronbach Alpha internal consistency reliability coefficient of 0.90. Analyses of the data gathered utilized the statistical tools specifically, frequency counts, weighted means, Analysis of Variance and Product-Moment Pearson Correlation Coefficient.

Approval of this study was granted University of Urdaneta City review board. Informed consent, as well as permission, was secured from different groups of parents of children with autism. Respondents were assured of confidentially and right to withdraw throughout the study.

2.1 Limitations

Health and education services are independently offered by public or private entities within the medium-sized urban locality in the Philippines of around 500,000 residents. Parents of the children with autism who are not availing both services at the time were excluded from this study. The health and education services referred to may or may not be present at the same school or health institution. The study also did not consider the severity of the children with autism.

The education services offered by a special education school may not be the same as the others. The said services described in the study are solely determined by the parents themselves with possible recommendations from either health or education professionals. Further, these services are placed under neither public or private surveillance nor case management/monitoring.

4. Results and Discussion

4.1 Results

The parents of the children with autism are relatively educated ranging from high school graduates up to graduate school level. They also belong to mostly Philippine middle-class income range. They have relatively small-sized family, and capable of availing specific health and educational services within the study locale.

Different health services availed for children with autism. Services from the occupational therapist and screening services were usually availed the most. Speech therapist and child psychiatrist/ developmental pediatrician services were also subsequently availed sometimes. Overall health services are just sometimes availed.

Implemented educational services are observed by the parents along the objectives, strategies methods, and programs resources. Educational programs were moderately implemented. The other components of health services were seen as implemented.

Specific demographics yielded significant differences in how the parents perceived the health and education services. The parent's number of children, income, and level of education significantly determined their responses in how they perceived educational programs and health services.

Table 1 F-value Results on the Differences across the Profile variables of Parent's Children with Autism

VIIII / LUIISIII				
	# of Children	Income	Educ	Period
			Degree	
Educational Services Objectives	1.267	15.991	2.632	2.448
		**		
Educational Strategies & Methods	.660	8.781	3.160	1.654
		**		
Educational Programs	8.784	87.285	5.287 **	.820
	**	**		
Educational Resources	6.437	45.246	1.750	1.275
	**	**		
Health Services	17.359	3.914	4.877 **	3.190
	**	**		

^{**&}lt;P0.01, *<P0.05

The parent's income levels also varied significantly across the different components of education services and availed health services as seen in table 1. Further, the period or length of the services was availed did not significantly vary the responses.

Correlations found in this study can be seen in table 2.

Health services were found to have a moderate positive relationship with availed educational programs (r=.493, p<0.01) and while having a weak positive relationship with educational resources (r=.356, p<0.01), respectively.

Implemented educational objectives also has a strong positive relationship between educational services strategies and methods (r=.870, p<0.01) while more moderate when it comes to availed resources (r=.455, p<0.01).

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Table 2 Correlations of Parent-initiated Health and Education Services for Children with Autism

Variables	1	2	3	4
1)Educational Objectives				
2)Educational Strategies	.870*			
& Methods	*			
2)E1 .: 1B	.202	.255		
3)Educational Programs		*		
	.455*	.484	.614	
4)Educational Resources	*	**	**	
	_	_	.493	356
Health Services	_	_	.¬/J	**

**<P0.01, *<P0.05, - not applicable

On the other hand, for educational resources and programs (r=.614, p<0.01) exists a moderately positive relationship. Similarly, it also has the same with rendered strategies & methods (r=.484, p<0.01).

4.2 Discussion

The absence of a system coordinating education and health services in the locale enabled parents to initiate availing of services to address the motor, language and social difficulties of children with autism. The study shows that the parents of children with autism's social determinants play a role in what service was availed in the locale Education, economic status, availability, among others as well as the accessibility of health services specifically for children with autism play a role in service utilization (Zuckerman, Lindly, Sinche, Nicolaidis, 2015; Nguyen et.al, 2016).

At its core, services availed were mainly focused based on the difficulties specific to the child's speech, sensory-motor function and problems in social interaction. This simply reflects to address the visible fine motor difficulties (McPhillips, et.al, 2014), balance coordination, finger to thumb opposition, speech articulation (Azad & Mandel, 2016) problems common among children with autism. The health services the parents of children with autism were specifically designed to achieve wellness and limit the disability. While Gillon, et.al (2017) mentioned that speech therapy is the most commonly used intervention, it is not the case for the parents of children with autism in this locality. This can be explained by the fact that speech therapy services are not readily available within the area. This also mirrors the global fact on the shortage of speech-language pathologists and increasing demand for it (Association of Speech-Language Hearing Association, 2018). On the other hand, this study revealed parents of children with autism availed occupational therapy programs more than any other services given that there is a college program offered in the locality of the study. This understandably contributes to the availability of this service.

The educational services objectives along with the strategies and methods regardless of the specific program centered on the needs of the child with autism are usually rendered from the parents and teacher's perspectives. Setting objectives and teaching strategies & methods are based on how the disability affects the child, and on previous progress (Spencer & Evers, 2011) is a common practice in making individualized educational plans regardless of specific programs or approach followed. This study affirms that set objectives implemented through strategies and methods yield positive outcomes (Ruble, McGrew, Dalrymple, & Jung, 2010). It also lends more support to what has been established that the implementation of the educational objectives can lead to supportive and structured learning environments (Hollander, Kolevzon. Coyle, 2011).

There is no specific education program determined to effectively help all the children with autism (National Research Council,2001; Azad & Mandel, 2016). Thus, different educational programs and approaches often arise. Some of the more novel programs may have yet to find their way to developing countries like the Philippines. The programs under study were the ones already in existence in the locale yet, it still revealed that these are not availed as much.

The parents with limited information and resources often choose the service not solely based on need but by prioritization of their recognized needs. Respective educational with varied programs their structure, administered by those with specialized training, unique approach, and accessibility and availability can be difficult for parents to avail for their children due to socioeconomic factors (St. Amant, et.al, 2018; Zuckerman et.al, 2015) and cultural/language barriers (Nguyen et.al, 2016) given the locality's diverse ethnic groups. Underutilization of readily available programs and resources may be due to issues of

parent inclusiveness (Ruble et. al 2010) and educational jargon (Chun, 2001 as cited by Jung, 2011). Further, this denotes that while there are available physical resources and materials there is still a need to utilize these resources in emerging innovative evidenced-based programs specific for children with autism that are present in the locality.

Health services and educational programs and resources correlating to each other highlight the value of one to the other. Linstead et al. (2017) noted that higher treatment intensity results in greater progress. In the locale, costs of services are taken into greater consideration. Thus, it is vital that gains from either milieu be reinforced in the other. Speech, and sensory motor difficulties addressed in occupational therapy get reinforced by activities in school and home, especially when parents and teachers understand (Gillon et.al, 2017; Klintwall & Eikeseth, 2012; ASHA, This reinforces the conceptual 2018). framework of the study that the intersection of health and education services facilitates a kind of environment wherein the child with autism is either placed within an environment designed to achieve wellness or remain within the confines of disability.

Linking health and education services (Christensen et.al, 2019) in a manner that would professionals both sets of communicate with each other can further facilitate improvement in the motor difficulties, sensory dysfunction, as well as impairments in communication and in social interaction. It has to be noted that the link seen in this study pertains to the relationship of the health and education services in a small locality as initiated and utilized by parents of children with autism. Further, by establishing the existence of the correlation of health and education services from the parents' perspectives, this study emphasizes the need to increase parental involvement in the decision making process and implementation of the respective health and education services in support of the study indicating parental cognition predicts service utilization (Siller, Reyes, Hotez, Hutman, & Sigman, 2013).

5. Conclusion

In the absence of legislation mandating a set of health and educational services for children with autism, the availed services parent initiated for their children without guidance and case management does not prevent its capacity to become an environment promoting wellness. Even with selective utilization of health and education services by the parents of children with autism in a locality without an existing framework effectively coordinating both sets of services, it is evident that services yielded positive outcomes as observed by the parents of the aforementioned developmental disorder.

Community-based case management linking and coordinating available services for children of autism is crucial. Formulation of health program packages specific for children with disabilities including autism in the local government levels is needed. A guiding framework should promote accessibility and availability to different coordinating health services and educational services in localities. Improving accessibility and availability to different health and education services for children with autism and those with other types of disabilities can foster wellness promotion. Further studies of qualitative design or mixed methodology are recommended to validate this study a wider scope, along with a more specific focus of education in terms of level and health services for children with autism.

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