

Awareness and Perception of Parents Regarding Well Baby Clinic in Primary Health Care Centres in Abha City, Southwestern Saudi Arabia

Ayed A. Shati¹, Majed M. Al-Saleh², Bander A. Al-Asmari²,
Shehata F. Shehata³, Youssef A. Alqahtani¹, Mohammed S. Aldarami⁴,
Sultan A. Alqahtani⁴, Yahya M. Alqahtani⁴

¹Department of Child Health, College of Medicine, King Khalid University, ²Family Medicine Department, Aseer Health Affairs, ³Department of Family and Community Medicine, College of Medicine, King Khalid University, ⁴Medical Student, College of Medicine, King Khalid University, Abha, Saudi Arabia

ABSTRACT

Background: Well-baby clinic (WBC) service is implemented in all primary health care centers and is provided based on international standards to all children under 5 years in Saudi Arabia. It is a comprehensive package of health promotion and curative care to improve and maintain the health status and well-being of this age group. **Aim:** The main aim is to assess parents' awareness and perception regarding WBC in primary health care centers in Abha sector, Kingdom of Saudi Arabia (KSA). **Methodology:** A descriptive cross-sectional approach was used in the current study. The study targeted all babies' caregivers attending WBCs in primary health care centers in Abha city. The children's parents were included using three stages cluster sample technique. The questionnaire included participants' demographic data such as age, gender, relation to the baby, educational level, work, and monthly income. Awareness regarding the WBC was assessed using two main items covering hearing about the clinic provided services. **Results:** The study included 1593 participants whose ages ranged from 19 to 55 years old with a mean age of 34.6 ± 11.8 years. About 64% of the respondents knew about the WBC, which was significantly higher among the females than males ($P = .003$). Also, 71.2% of respondents aged 25–34 years knew about well-baby clinic (WBC) compared to 35% of parents aged less than 25 years ($P = .001$). Exact 57.1% of the respondents went to the nearest governmental health office at vaccination times. About 46% of the respondents reported that the clinic nurse was the main person who dealt with them. Regarding services provided by a nurse at the vaccination clinic, registering child vaccination was the most reported (66.2%), followed by helping the mother make the child calm (56.8%). **Conclusions:** In conclusion, the study revealed that proper care is vital for a child's survival as well as optimal physical and mental development. Adequately cared child has proper well-being and happiness. Mothers and children caregivers had adequate awareness and acceptable attitude towards WBCs and provided services. Some barriers were declared including lack of available WBCs within the residence range, not all WBCs usually working, and more information should be provided about WBCs.

Keywords: Awareness, child-care, parents, perception, practice, Saudi Arabia, well baby clinic

Introduction

The well-baby clinics (WBC), or well-child clinics as they are commonly known, deal with the health and well-being of children and families.^[1] As public health clinics, they provide a safety net

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

For reprints contact: WKHLRPMedknow_reprints@wolterskluwer.com

Address for correspondence: Dr. Ayed A. Shati,
Department of Child Health, College of Medicine, King Khalid
University, P. O. Box 641, Abha, Saudi Arabia.
E-mail: shatiayed@gmail.com

Received: 11-05-2021

Revised: 28-06-2021

Accepted: 04-07-2021

Published: 30-09-2021

Access this article online

Quick Response Code:



Website:
www.jfmpc.com

DOI:
10.4103/jfmpc.jfmpc_871_21

How to cite this article: Shati AA, Al-Saleh MM, Al-Asmari BA, Shehata SF, Alqahtani YA, Aldarami MS, *et al.* Awareness and perception of parents regarding well baby clinic in primary health care centres in Abha City, Southwestern Saudi Arabia. J Family Med Prim Care 2021;10:3464-9.

for the economically disadvantaged by offering low-cost health care.^[2] The clinics operate on a sliding fee scale or give free care to families who are unable to pay. One of the important services offered by WBCs is providing immunizations for childhood diseases such as tetanus, diphtheria, pertussis, polio, hemophilus influenza type b, hepatitis B, measles, mumps, rubella, and varicella.^[3,4] The clinics are assigned for tracking immunization rates in the community and notifying families when the time of vaccines is. Families usually ask why their children need routine health care when they have already received all their required immunizations. The answer is simply that well-child clinics provide an array of preventative services and diagnostic procedures.^[4] Infants and children are checked for growth and delay in development. The staff checks muscle imbalance at each visit, the ears for infection, the eyes for vision abnormalities, the heart for murmurs, and the hips for developmental dysplasia.^[5-7] Families are often not aware of available community services and programs. The staff of WBCs provides referrals to other agencies for financial counseling. Referrals to other health coverage programs are also often discussed in the WBC.^[8,9] Most importantly, the staff provides parenting guidance for those with no support system to reduce child abuse and neglect.^[10] With appropriate information and support from primary care physicians in WBCs, they could provide much of the care for children. Generalists and specialists are both accountable for educating and directing parents about the role of WBCs. The primary care physicians can play in caring for children with serious chronic illnesses.^[11] The current study was conducted to assess parents' awareness and perception regarding the WBCs in primary health care centers in Abha sector, Kingdom of Saudi Arabia (KSA). Also, to assess attendants' determinants of their awareness and perception regarding WBCs.

Methodology

A descriptive cross-sectional approach was used in the current study. The study targeted all babies' caregivers attending well-baby clinics in primary health care centers in Abha city. A total sample of 770 babies' caregivers were required assuming that awareness level regarding the clinics' services and skills equals 50% (assumed due to lack of similar information on literature) with a precision of 5% at 95% confidence level. The children's parents were included using the three stages cluster sample technique. In the first stage, all districts of Abha city were included. In the second stage, primary health care centers with WBCs in the sectors were included. In the third stage, a random sample of caregivers was included using a systematic random sample method by including each 3rd attendant. After having the ethical approval, the data were collected using a direct interview questionnaire developed by the researchers after intensive literature review and expert's consultation besides reviewing provided health care services and skills within the questionnaire. Questions included participants' demographic data such as age, gender, relation to the baby, educational level, work, and monthly income. Awareness regarding the WBC was assessed using two main items covering hearing about the clinic and parents' services. Parents' perception

was assessed using two dimensions including the availability and work time of WBC besides parents' satisfaction regarding the provided services. The third section included items covering the availability of medical staff, equipment, and health education advice and instruments.

Data analysis

After the data were collected, they were modified, coded, and entered into statistical software IBM SPSS version 22 (SPSS, Inc. Chicago, IL). All statistical analysis was done using two-tailed tests. *P* values less than 0.05 were considered to be statistically significant. Descriptive analysis based on the frequency and percentage distribution was done for all variables, including parents' demographic data, knowledge regarding WBC, practice, and attitude towards WBC's provided services. Cross tabulation was used to test for the distribution of parents' awareness regarding WBC by their bio-demographic data. Pearson Chi-square test was used to test for relations significance.

Results

The study included 1593 participants whose ages ranged from 19 to 55 years old with a mean age of 34.6 ± 11.8 years. An exact of 54.3% were mothers, and 63.4% were working. Monthly income of 5000 to 15000 SR was reported among 45.8% of the respondents, and 78.8% were university graduated. Having less than two children was reported by 31.8% of the participants, and 17.1% had five children or more [Table 1].

Table 2 shows the distribution of participants' knowledge regarding WBC by their personal data. An exact 64.1% of the respondents knew about the WBC, which was significantly higher among the females than males (67.4% vs. 60.2%, respectively, $P = .003$). Also, 71.2% of the respondents aged 25–34 years knew about WBC compared to 35% of the parents aged less than 25 years ($P = .001$). An exact of 68.2% of the parents working at governmental section knew about WBC compared to 60.5% of the non-working group ($P = .001$). An exact 67.2% of the parents with 2–5 children knew about WBC compared to 56.6% of those who had less than two children ($P = .001$). Regarding knowing about services provided by WBC, vaccination was reported by 52.3% of the male respondents compared to 47.7% of the females ($P = .001$). Also, vaccination services were reported by 33.1% of the parents aged 35–44 years compared to 18.4% of those aged less than 25 years ($P = .001$). An exact 83.3% of university graduated parents reported for vaccination services at WBC compared to 3.6% of those who had an educational level below secondary ($P = .023$). Also, 50.2% of the parents with 2-5 children knew about vaccination services compared to 19.4% of those with more than five children ($P = .001$).

Table 3 illustrates participants reported practice and services perception regarding the WBC. An exact of 57.1% of the respondents went to the nearest governmental health office at vaccination times. About 46% of the respondents reported that clinic nurse was the main person who dealt with them, and the

Table 1: Sampled parents' personal data, Abha City, Saudi Arabia

	No	%
Gender		
Male	728	45.7%
Female	865	54.3%
Age in years		
< 25 Yrs.	334	21.0%
25-34	458	28.8%
35-44	521	32.7%
45+	280	17.6%
Work		
Not working	583	36.6%
Governmental	853	53.5%
Private	157	9.9%
Monthly income		
<5000 SR	511	32.1%
5000-15000 SR	730	45.8%
15000-20000 SR	202	12.7%
>20000 SR	150	9.4%
Educational level		
Below secondary	64	4.0%
Secondary	273	17.1%
University/above	1256	78.8%
Number of children		
<2 children	507	31.8%
2-5 children	814	51.1%
>5 children	272	17.1%

most reported services provided by WBC physicians were taking the child medical history (65.9%), greeting and give appropriate consultation and health education (HE) (60.9%), and give analgesics after vaccination (51.5%). Regarding services provided by a nurse at the vaccination clinic, registering child vaccination was the most reported (66.2%), followed by helping mother to make child calm (56.8%), calm the child fear (55.3%), and provide HE for mothers regarding breastfeeding (32%). As for instruments at WBC, 78.8% of the respondents reported weight, temperature, and length instruments, whereas 71.2% talked about childbed, and 60.6% reported manual or electronic child files. An exact 68.8% of the respondents reported that WBC informed them of their child's coming vaccination date. Also, 15.1% of the respondents reported that child hospital referral by WBC for health problems was done.

With regard to participant's attitudes regarding services provided by the WBC [Figure 1], 63.3% of the respondents reported that WBC nearly worked all times, whereas 4.5% said that WBC in their area was not working. As for respondent's satisfaction regarding services provided by WBC, 37.1% were satisfied, 38.7% were partially satisfied, and 5.2% were dissatisfied.

Discussion

The study aimed to assess participant's awareness and perception regarding WBCs in Abha, Southern of Saudi Arabia. WBC or childcare means caring for and supervising the child, generally from birth till puberty. Childcare may be defined as the care of

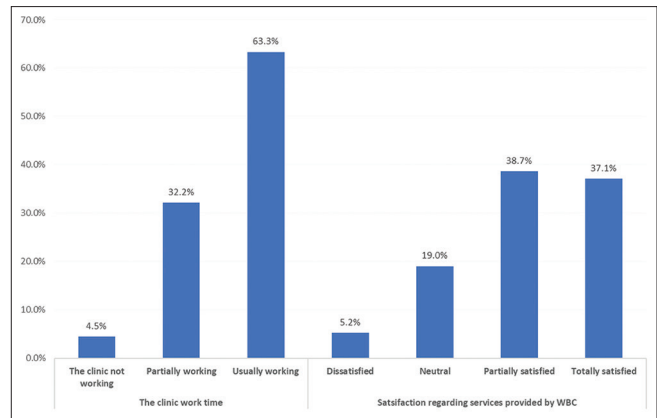


Figure 1: Participants attitude regarding services provided by the well-baby clinic, Abha City, Saudi Arabia

those children provided by the adults, including health care staff. Unofficially, this service is mainly provided by their families, grandmothers, or other relatives, whereas proper care facilities include government care institutions, school teachers, or private care centers.^[9,10] Child care includes identifying child-needed vaccinations, services, and danger signs. Some easily identifiable danger signs have been incorporated in the mother and child pamphlet, mostly not used by mothers or even know about it.^[12,13] WBCs may provide mothers and childcare givers with all needed information regarding childcare and developmental milestones.

The current study revealed that nearly two-thirds of the mothers or childcare givers knew about childcare and WBC. Awareness was significantly higher among female participants, young aged group working mothers with more than one child. This can be explained by that females are mostly mothers who work and responsible for child care. Most mothers are the main caregiver for the child who is usually concerned with the vaccination schedule, health assessment and mostly seek medical consultation, which made them more liable to visit WBCs and know about provided services. As for participant's awareness regarding provided services in the WBC, nearly half of the respondents reported curative services, health education, and vaccinations. Sokhela DG *et al.*^[14] assessed well-baby visits in primary health care facilities in a middle-income country reported that babies were shown to have been immunized in all reviewed records, whereas discussion of side-effects and the given therapy were only recorded in 9.7% charts. Also, nearly 99% of babies were weighed, but only 71% of weights were 'plotted,' and 56.3% classified according to the integrated management of childhood illnesses standards. Qayyum A *et al.*^[15] revealed that the majority of mothers had good awareness regarding childcare and care practices. Also, the mother's understanding, education, and child number influence the quality of childcare. Another study conducted by Kibaru EG and Otara AM^[8] revealed that the majority of mothers, i.e. 84.5% identified less than three neonatal danger signs. Fever was the commonly recognized danger sign by 74.9% of postnatal mothers. About 46%, 40%, 35%, and 6% identified difficulty in breathing, poor sucking, jaundice, and lethargy/unconsciousness as newborn danger signs, respectively.

Table 2: Distribution of participants' knowledge regarding WBC by their personal data

Factors	Know about the well-baby clinic	Services at WBC		
		Curative services	Health education	Vaccination only
Gender				
Male	60.2%	50.5%	46.1%	52.3%
Female	67.4%	49.5%	53.9%	47.7%
P	0.003*		0.001*	
Age in years				
<25 Yrs.	53.0%	25.2%	23.3%	18.4%
25-34	71.2%	29.2%	27.8%	32.9%
35-44	69.1%	29.6%	31.9%	33.1%
45+	56.4%	16.0%	16.9%	15.6%
P	0.001*		0.001*	
Work				
Not working	60.5%	36.0%	36.2%	33.6%
Governmental	68.2%	52.2%	53.8%	56.5%
Private	54.8%	11.7%	10.1%	9.9%
P	0.001*		0.047*	
Monthly income				
<5000 SR	57.7%	33.7%	30.3%	28.1%
5000-15000 SR	67.4%	43.1%	47.5%	49.3%
15000-20000 SR	70.8%	12.7%	12.9%	14.1%
>20000 SR	60.7%	10.5%	9.3%	8.4%
P	0.001*		0.012*	
Educational level				
Below secondary	62.5%	3.5%	4.3%	3.6%
Secondary	64.1%	16.9%	16.7%	13.1%
University/above	64.2%	79.6%	78.9%	83.3%
P	0.964		0.023*	
Number of children				
<2 children	56.6%	35.9%	32.7%	30.5%
2-5 children	67.2%	49.6%	49.2%	50.2%
>5 children	68.8%	14.4%	18.1%	19.4%
P	0.001*		0.001*	

P: Pearson χ^2 test. *P<0.05 (significant)

Regarding parents and childcare givers reported practice and services perception for a WBC, the current study showed that more than half of the participants went to the nearest governmental health office, the WBC for child vaccination. The nurse and general practitioner physician were the most reported staff who dealt with mothers while visiting the WBC. Taking the child's medical history, physical examination of the child, and giving health education notes were the most reported services provided by physicians at the WBCs. Registration of the child for vaccination and calm the child's fear were the main services provided by the nurse. The surprising findings were that there was a lack of health education posters (only half of the clinics had), and only one-third of the WBC attendants were informed about the next vaccination date, which is a shortage at the staff role. Braun SJ *et al.*, in his published article listed staff roles in the WBC.^[16] He said that the clinic should have adequate heat, light, and ventilation, as well as running water. Sometimes clients are provided bus tokens for transportation. The nurse is designated responsible for the clinic and its operations in addition to her work with the families, the doctor for the medical care of the family. These two professionals may divide the work in several ways, depending on the nurse-doctor ratio. The current study revealed

that only two-thirds of the childcare givers declared that WBCs are usually working and not closed. Also, one-third were totally satisfied regarding services provided by a WBC in their area.

Many studies bases on additional health services and care provided to the children in the general hospitals, with the long-term goal of developing evidence-based practices that map the health care needs of this population with little concern or the role of WBCs. To fill this gap, the current study was concerned to evaluate the nature and satisfaction regarding the services provided in these settings covering physical and mental health conditions. Appropriate role regarding immunizations and milestone assessment was reported, whereas there were some limitations regarding accessibility and provided health education.

Conclusions

Proper care is vital for a child's survival as well as optimal physical and mental development. Adequately cared child has proper well-being and happiness. Care is vital for the nutritional well-being of the young child. Caregiving involves breastfeeding, detecting illness, and determining child developmental

Table 3: Participants reported practice and services perception regarding well-baby clinic, Abha City, Saudi Arabia

Participants practice regarding WBC		No	%
What to do on child vaccination time	Use the application to have an appointment	523	32.8%
	Go to the nearest governmental health office	910	57.1%
	Go to the nearest private health care facility	107	6.7%
	Delay for another time	53	3.3%
Who deals with you at WBC	At reception	879	55.2%
	Clinic nurse	734	46.1%
	General Practitioner	621	39.0%
	Family medicine specialist	430	27.0%
	Family medicine consultant	432	27.1%
Services provided by WBC physician	Not meeting the physician	103	6.5%
	Give analgesics after vaccination	866	54.4%
	Taking the child medical history	1050	65.9%
	Doing physical examination for the child	820	51.5%
	Greeting and give appropriate consultation and HE	970	60.9%
Services provided by a nurse at vaccination clinic	Calm the child fear	881	55.3%
	Help mother to make child calm	905	56.8%
	Register child vaccination	1054	66.2%
	Ask the mother to wait for 30 min after vaccination	347	21.8%
	Provide HE for mothers regarding breastfeeding	510	32.0%
Instruments at WBC	Weight, temperature, length instrument	1255	78.8%
	Childbed	1134	71.2%
	Manual or electronic child file	966	60.6%
	HE posters	942	59.1%
	WBC informing you of your child coming vaccination date	Never	497
	Sometimes	505	31.7%
	Usually	591	37.1%
Child hospital referral by WBC for a health problem	Yes	241	15.1%
	No	1352	84.9%

milestones. In this study, mothers and children caregivers had adequate awareness and acceptable attitude towards WBCs and provided services. Some barriers were declared including the lack of available WBCs within the residence range, not all WBCs usually working, and some information that should be provided (especially for vaccination) may be ignored. Proper WBCs services promote healthy and safe surroundings for the child and provide sufficient health care for the child's psycho-social care and emotional support.

Ethical considerations

The study was conducted in accordance with the Declaration of Helsinki, and the Ethics and Research Committee of the College of Medicine of King Khalid University approved the protocol.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

References

- Henriksson KM, McNeil TF. Health and development in the first four years of life in offspring of women with schizophrenia and affective psychoses: Well-Baby Clinic information. *Schizophr Res* 2004;70:39-48.
- Kviz FJ, Dawkins CE, Ervin NE. Mothers' health beliefs and use of well-baby services among a high-risk population. *Res Nurs Health* 1985;8:381-7.
- Berger R, Gelkopf M. An intervention for reducing secondary traumatization and improving professional self-efficacy in well-baby clinic nurses following war and terror: A random control group trial. *Int J Nurs Stud* 2011;48:601-10.
- Muathe EC, Kamau M, Rajula E. Exploring strategies to improve adherence to immunization schedule: A study among children attending maternal and child health clinic at Kenyatta National Hospital, Nairobi, Kenya. *Int J Pediatr* 2020;2020:4730205.
- Kim SW, Kim YK, Chung HJ. Well baby clinic: Developmental guidance according to the parent's chief complaints. *J Korean Med Assoc* 2009;52:244-61.
- Vora H, Shah P, Mansuri SH. A study on developmental delay among children less than two year attending well-baby clinic-Prevalence and antecedents factors. *Int J Med Sci Public Health* 2013;2:1084-7.
- Khateb Z. Improving health and preventing disease in a community Well Baby Clinic. *Int J Hum Caring* 2015;19:79.
- Kibaru EG, Otara AM. Knowledge of neonatal danger signs among mothers attending well baby clinic in Nakuru Central District, Kenya: Cross-sectional descriptive study. *BMC Res Notes* 2016;9:1-8.
- Goyal NK, Brown CM, Folger AT, Hall ES, Van Ginkel JB,

- Ammerman RT. Adherence to Well-Child Care and home visiting enrollment associated with increased emergency department utilization. *Matern Child Health J* 2020;24:73-81.
10. NICHD Early Child Care Research Network, editor. *Childcare and Child Development: Results from the NICHD Study of Early Childcare and Youth Development*. Guilford Press; 2005.
 11. Felfe C, Lalive R. Does early childcare affect children's development? *J Public Econ* 2018;159:33-53.
 12. Kibaru EG, Otara AM. Utilization of mother and child booklet among mothers attending well baby clinic in Nakuru Central District. *Int J Sci Res (IJSR)* 2015;4:2642-8.
 13. Nigatu SG, Worku AG, Dadi AF. Level of mother's knowledge about neonatal danger signs and associated factors in North West of Ethiopia: A community-based study. *BMC Res Notes* 2015;8:1-6.
 14. Sokhela DG, Sibiyi MN, Gwele NS. Monitoring well-baby visits in primary healthcare facilities in a middle-income country. *S Afr J Child Health* 2018;12:44-7.
 15. Qayyum A, Hassan S, Zafar A. A study of mother's knowledge about childcare and care practices in Lahore, Pakistan. *Bull Educ Res* 2015;37:1-8.
 16. Braun SJ. The well baby clinic: Its prospects for building ego strength. *Am J Public Health Nations Health* 1965;55:1889-98.