Research Article

Assessment of child abuse at ground and grassroot level: a KAP study among anganwadi workers and auxiliary nurse midwives in Bangalore

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Abstract

Background: Anganwadi workers (AWW) and auxiliary nurse midwives (ANM) whom we can say in Indian scenario work at grassroot level and ground level, respectively, very close to rural community where child abuse is more frequent and unreported, which affects a child physically, mentally, emotionally, and psychologically.

Objective: To assess the level of knowledge, attitude, and practice (KAP) against child abuse among AWW and ANM.

Materials and Methods: This study was undertaken with the help of a pretested self-administered questionnaire in both the groups. A total of 69 AWW and 53 ANM during their scheduled monthly meetings were targeted in the study. After explaining the need for the study and assuring confidentiality for answers for the study, they were asked to fill the questionnaire. Completed questionnaires were collected back and subjected to data analysis.

Results: The highest mean knowledge score was among AWW and ANM who had 8–10 years of experience, which was statistically significant; the mean attitude score was not statistically significant among AWW and ANM; and the mean practice score was highest among AWW and ANM who had 8–10 years of experience, which was statistically significant. It was found that knowledge correlated significantly with attitude and practice.

Conclusion: Knowledge and attitude toward child abuse at grassroot level among AWW is insufficient when compared to ground level among ANM, but practice about procedures and reporting after detection of child abuse was disappointingly lacking among AWW and ANM, urging to enforce and reinforce formal education among them with the help of lectures and printed materials with color plates of abuses, which would enable detection and reporting of this social public health evil to get eradicated.

KEY WORDS: Child abuse, anganwadi worker, auxiliary nurse midwives

Introduction

Abuse can be physical, mental, or emotional, in which the child suffers bodily harm as a result of a deliberate attempt to hurt the child, or severe discipline or physical punishment which is inappropriate to the age of the child.[1] It can be in the form of child neglect, when a caregiver does not provide basic needs, adequate food, clothing, hygiene, shelter, supervision, medical care, or support to the child.[1,2] The UK government has identified the key outcomes, which matter most to children, including child being healthy and staying safe (i.e., being protected from harm and neglect).[3] Currently, the definition given by CAPTA (Child Abuse Prevention and Treatment Act) also includes sexual abuse, sexual exploitation, physical or emotional abuse, and willful cruelty or unjustifiable punishment of a child.[4] Child trafficking is also considered as a form of child abuse, which largely remains hidden within our society. Last decade has brought a growing awareness of this form of abuse which has significant and far-reaching consequences among children.[5]

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Studies from past have shown children and the mothers recorded for the emotionally abused or neglected children were noted as insecure attachment to mother, passivity, withdrawn behavior, cognitive and developmental delay, language delay, anger, uncontrolled or ambivalent emotions, low self-esteem, socially aggressive behavior, and attention-deficit issues. Those mothers who emotionally abused or neglected their child displayed behaviors described as undergoing severe depression, hostility toward the child, lack of interest in the child, low sensitivity, lack of verbal communication with the child, withdrawn, no offer of affection or comfort to the child, and verbal aggression. A child who experienced emotional abuse and neglect can present with characteristics similar to autistic spectrum, which result in lifelong challenges for the child.[6]

In India, child abuse was found to be prevalent more among girls and sexual abuse was most common (84.2%). About 52.6% of the abusers were found to be members whom the victim knew. Goa from the west followed by southern region of India showed the maximum cases. The motives and consequences of the abuses are not mentioned explicitly in the past literature.[7]

Responsibilities of anganwadi workers (AWW) include to show community support and active participation in executing any public health program, to conduct regular quick surveys of all families, to organize preschool activities, and to provide health and nutritional education to families, especially pregnant women such as to how to breast-feed.[8] Further, auxiliary nurse midwives (ANM) are placed lowest in the hierarchy of health-care delivery system in a subcenter, which is the first contact point between community and health-care delivery system.[9]

These two workers work very close to the community and hence they should have a sound knowledge of detecting and reporting a child abuse if any. Hence, this study aimed to assess the level of knowledge in detection of attitude toward child abuse and practices after detection of child abuse among AWW and ANW.

Materials and Methods

This was a cross-sectional study conducted to assess knowledge, attitude, and practice of AWW and ANW toward child abuse. Primary data were obtained by questionnaires that were handed over to AWW and ANW during their schedule meetings. Ethical approval was obtained from the institutional review board of Dr. Syamala Reddy Dental College Hospital & Research Center, Bangalore, Karnataka, India.

A pilot study was conducted on four AWW and three ANW to check for the feasibility of the study. Also, the questionnaire that was given to them in pilot study helped in assessment of validity and reliability of the same. A simple random sampling technique was used to select the office where monthly meetings were conducted.

AWW and ANW were selected as samples for this study as they work for bridging the gap between families, societies, and communities at large. AWW and ANW who willfully agreed to participate in the study and who had an experience of minimum 1 year were included in this study. They were explained about the survey and were requested to fill the questionnaire. Even though confidentiality was explained and guaranteed to them, names were asked for, but it was an optional entry to be filled in by the respondents. Eight AWW and three ANW were not willing to fill the questionnaire and participate in the study. A total of 69 AWW and 53 ANW took part in the survey by answering the questionnaires, making a total of 122 participants in the study.

The knowledge, attitude, and practice toward child abuse among AWW and ANW was assessed using a self-administered questionnaire with a total of 20 questions. Data obtained with the help of questionnaires were compiled and subjected to statistical analysis using χ^2-test, two-way Kruskal–Wallis test, and Spearman correlation test.

Results

For better pronunciation of results, AWW and ANM were subdivided based on their experiences. Among 69 AWW, 36 (52.7%) were having an experience of 1–3 years, 23 (33.3%) were having an experience of 4–7 years, and 10 (14%) were having an experience of 8–10 years. Among 53 ANW, 23 (43.4%) were having an experience of 1–3 years, 19 (35.8%) were having an experience of 4–7 years, and 11 (20.7%) were having an experience of 8–10 years [Table 1].

Of 69 AWW, only 24 (34.7%) answered the knowledge questions correctly. Among those who answered knowledge questions correctly, 5 of 36 (13.8%) were having an experience of 1–3 years with a mean knowledge score of 3.4 ± 1.8; 11 of 23 (47.8%) were having an experience of 4–7 years with a mean knowledge score of 3.9 ± 2.6; and 8 of 10 (80%) were having an experience of 8–10 years with a mean knowledge score of 7.6 ± 1.3.

The remaining 45 (65.3%) AWW could not answer these knowledge questions correctly. Among 53 ANW, 41 (77.3%) answered the knowledge question correctly. Among ANW who answered knowledge-related questions correctly, 16 of 23 (69.5%) were having an experience of 1–3 years with a mean knowledge score of 4.2 ± 2.5; 15 of 19 (78.9%) were having an experience of 4–7 years with a mean knowledge score of 5.1 ± 2.1; and 10 of 11 (91%) were having an experience of 8–10 years with a mean knowledge score of 8.2 ± 2.6. The rest 12 (22.6%) could not answer

Table 1: Distribution of study population based on their experience

Experience (years)	Anganwadi worker	Auxiliary nurse midwives	Total
1–3	36 (60.1%)	23 (38.9%)	59 (48.4%)
4–7	23 (54.7%)	19 (45.3%)	42 (34.4%)
8–10	10 (47.6%)	11 (52.4%)	21 (17.2%)
Total	69 (56.5%)	53 (43.5%)	122 (100%)

Table 2: Assessment of knowledge regarding child abuse

Experience (years)	Anganwadi worker			Auxiliary nurse midwives			Total
	Correct	Incorrect	Mean score	Correct	Incorrect	Mean score	
1–3	5 (13.8%)	31 (86.2%)	3.4 ± 1.8	16 (69.5%)	7 (30.5%)	4.2 ± 2.5	59 (48.4%)
4–7	11 (47.8%)	12 (52.2)	3.9 ± 2.6	15 (78.9%)	4 (21.1%)	5.1 ± 2.1	42 (34.4%)
8–10*	8 (80%)	2 (20%)	7.6 ± 1.3	10 (91%)	1 (9%)	8.2 ± 2.6	21 (17.2%)
Total	24 (34.8%)	45 (65.2%)		41 (77.3%)	12 (22.7%)		122 (100%)
p-Value				0.03*			

*Significant correlation.

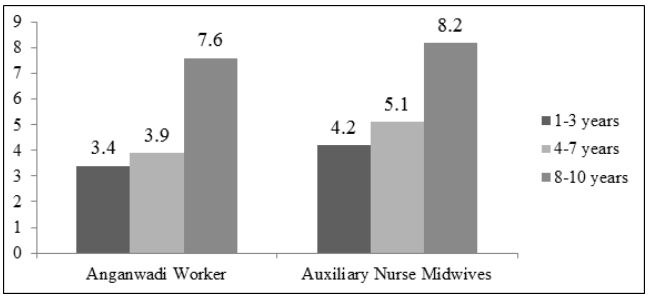

Figure 1: Mean knowledge score of detection of child abuse among those who correctly answered.

knowledge-related questions correctly. The *p*-value for knowledge was found to be statistically significantly associated with experience [Table 2; Figure 1].

Of 69 AWW, only 54 (78.2%) had a positive attitude toward curbing and stopping child abuse. Among those showing positive attitudes, 28 of 36 (77.7%) were having 1–3 years of experience and had mean attitude score of 3.2 ± 1.1; 18 of 23 (78.2%) were having an experience of 4–7 years and had mean attitude score of 2.9 ± 1.8; and all 10 having an experience of 8–10 years had positive attitude toward curbing and stopping child abuse with a mean attitude score of 4.6 ± 1.5. The remaining 15 (21.7%) of 69 had neutral attitude toward child abuse. Among 53 ANW, 49 (92.4%) had positive attitude toward curbing and stopping child abuse. Among these 49, 21 of 23 (91.3%) were having an experience of 1–3 years with a mean attitude score of 3.4 ± 1.2; 17 of 19 (89.4%) were having an experience of 4–7 years with a mean attitude score of 3.1 ± 1.9; and remaining all 11 (100%) were having an experience of 8–10 years with a mean attitude score of 4.3 ± 1.7. The remaining 4(7.5%) had a neutral attitude toward child abuse. The *p*-value for attitude was not found to be statistically associated [>0.05(0.8)] with experience [Table 3; Figure 2].

Practice questions were targeted toward assessment of procedures needed to be followed after detection of child abuse. Of 69 AWW, only 10 (14.5%) adequately knew about the procedures and correct reporting of child abuse after detection. Of those who knew correct procedures after detection of child abuse, 3 of 23 (13.1%) were having experience of 4–7 years with a mean score of 2.9 ± 1.8, and 7 of 10 (70%) were having an experience of 8–10 years with a mean score of 6.6 ± 1.5. The rest 60 (86.9%) did not know about any procedure to be followed after child abuse detection. A similar scenario was observed for practice after child abuse detection with only 16 (30.1%) ANM knowing about procedures on encountering a child abuse and correctly reporting it. Among these ANM, 1 of 23 (4.3%) were having an experience of 1–3 years with a mean score of 3; 5 of 19 (26.3%) were

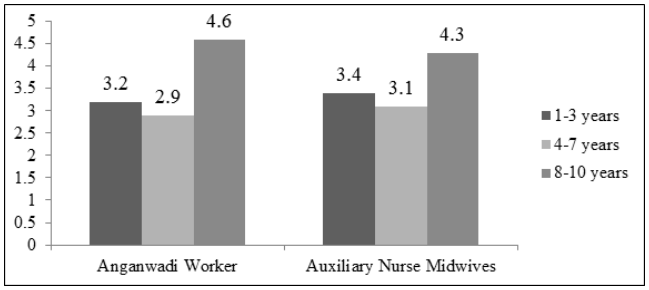

Figure 2: Mean attitude score for curbing and eliminating child abuse.

Table 3: Assessment of attitude toward child abuse

Experience (years)	Anganwadi worker			Auxiliary nurse midwives			Total
	Positive	Neutral	Mean ± S.D	Positive	Neutral	Mean ± S.D	
1–3	28 (77.7%)	8 (22.3%)	3.2 ± 1.1	21 (91.3%)	2 (8.7%)	3.4 ± 1.2	59 (48.4%)
4–7	18 (78.2%)	5 (21.8%)	2.9 ± 1.8	17 (89.4%)	2 (10.6%)	3.1 ± 1.9	42 (34.4%)
8–10	10 (100%)	0 (0%)	4.6 ± 1.5	11 (100%)	0 (0%)	4.3 ± 1.7	21 (17.2%)
Total	54 (78.3%)	15 (21.7%)		49 (92.4%)	4 (7.6%)		122 (100%)
p-Value	>0.05 (0.8)						

Table 4: Assessment of practice after detection of child abuse

Experience (years)	Anganwadi worker			Auxiliary nurse midwives			Total
	Knew	Did not know	Mean ± SD	Knew	Did not know	Mean ± SD	
1–3	0 (0%)	36 (100%)	0	1 (4.3%)	22 (95.7%)	3	59 (48.4%)
4–7	3 (13.1%)	20 (86.9%)	2.9 ± 1.8	5 (26.3%)	14 (73.7%)	4.5 ± 1.8	42 (34.4%)
8–10*	7 (70%)	3 (30%)	6.6 ± 1.5	10 (90.9%)	1 (9.1%)	5.4 ± 1.5	21 (17.2%)
Total	10 (14.5%)	53 (85.5%)		16 (30.2%)	37 (69.8%)		122 (100%)
p-Value				0.001*			

*Significant correlation.

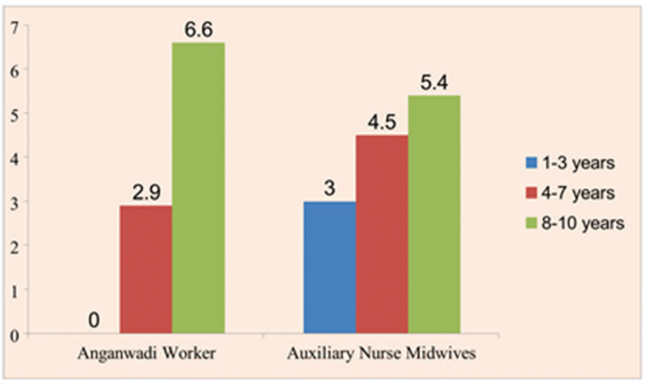

Figure 3: Mean Practice score for post child abuse detection.

Table 5: Correlations among different variables

Correlations		Knowledge score	Attitude score	Practice score
Knowledge score	R	1	0.174	0.168
	p-Value	–	0.02*	0.04*
Attitude score	R	0.174	1	0.087
	p-Value	0.02*	–	0.27
Practice score	R	0.168	0.087	1
	p-Value	0.04*	0.27	–

*Significant correlation.

having an experience of 4–7 years with a mean score of 4.5 ± 1.8; and 10 of 11 (90.9%) were having an experience of 8–10 years with a mean score of 5.4 ± 1.5. The rest 37 (69.9%) did not know about any procedure to be followed after child abuse detection. The *p*-value for practices after child abuse detection was found to be statistically significantly associated with experience [Table 4; Figure 3].

There was a statistically significant correlation between knowledge and attitude with a *p*-value of 0.02, and knowledge and practice a with *p*-value of 0.04. On the other hand, no significant correlation was found between attitude and practice score with a *p*-value of 0.27 [Table 5].

Discussion

Child abuse and neglect in any form will leave the child with long-lasting scars that may be physical or psychological, but these are the emotional scars that leave the child with lifelong effects, which damage the child's sense of self, their ability to build healthy relationships with people in society, work at school, or functions in a family. To numb the painful feelings, a child may even fall into malpractices such as alcoholism and drug addiction. However, the exposure by the child to violence during childhood can increase vulnerability of that child to mental and physical health problems such as anxiety disorder and depression, and make victims more likely to become perpetrators of violence later in life.[1]

The analysis of journal articles showed that the studies on child abuse were mainly conducted in the hospital setting, predominantly case reports. Knowledge, attitude, and practices regarding child abuse were restricted to medical personnel and mothers.[7] Further systematic review has highlighted a paucity of studies addressing the characteristics of dental neglect and child abuse in children, suggesting that the research community has ignored this aspect of maltreatment. The results our study showing lack of information to detect child abuse of this review were in agreement with the systematic review conducted by Bhatia et al.,[3] who found that abused children included a failure to seek appropriate care in a timely way.

This study highlighted a lack of knowledge and practice about child abuse among AWW and ANM who were less experienced. Although these workers were having a highly positive attitude toward eradication of child abuse, the findings of this study were similar to the findings of a study conducted among dental students that showed dental students lack sufficient knowledge of child abuse and postdetection procedures after a child abuse is suspected/detected.[10]

Findings similar to this study were found in a study conducted by Sonbol et al.[11] among Jordanian dentists, which showed a significant gap between recognizing signs of physical child abuse and responding effectively. In addition, knowledge of Jordanian dentists about the indicators of physical child abuse is poor and needs to be improved, which was similarly found among AWW and ANW in India as well. The main reasons for dentists not reporting child abuse included uncertainty about diagnosis and referral procedures, which was also the reason found for AWW and ANM not reporting as they answered a question regarding reporting of child abuse as being a different bench and shall be dealt by police department.

The strength of this study is the use of a prevalidated and reliable questionnaire that gave the results for this study. Not only this, this study with the help of statistical analysis comparison between two groups was also possible. However, the limitation of this study could be a smaller sample size. But as this was a first study of its kind in India, these data can be used as a baseline data and further studies can be conducted in this direction.

After retrieval of the questionnaires irrespective of their answers, all the AWW and ANW were provided with a 40-min lecture on child abuse, its detection, and its procedures, which need to be followed after that.

Child protection is a duty of every single member of the society.[12] Health workers who work with children, such as AWW and ANM, are in the unique position to recognize signs of physical, sexual, and emotional abuse as well as neglect. They should report any suspected case where a child is or may be in need of welfare.

Considering the need of the hour to eradicate child abuse from India in the upcoming decade, this study was conducted at grassroot level and ground level, respectively, among AWW and ANW because these are the staff who work close to the community and children. These workers, thus, can have a pivotal role in eradication of child abuse from India.

Conclusion

AWW and ANM were not sufficiently prepared to know what to look for when they suspect child abuse and what to actually do when they encounter this problem in a rural setting.

Although their attitude against child abuse was highly positive, they were not concentrating on suspecting child abuse. Hence, following recommendations have been put forward

- To provide better care for these young domestic violence victims, focus should on providing these staff with an exclusive, concrete educational experience regarding child abuse cases during their training.
- Government should stringently infuse measures regarding child abuse detection and reporting irrespective of high/low-risk population.
- Special periodic training courses regarding child abuse detection shall be carried out for these staff working at grassroot level and ground level.

References

1. Kemoli AM, Mavindu M. Child abuse: a classic case report with literature review. Contemp Clin Dent 2014;5(2):256–9.
2. Datta P, Datta S. Sensitization of dental team towards management of child abuse and dental neglect. Indian J Forensic Odontol. 2012;5:3;97–103.
3. Bhatia SK, Maguire SA, Chadwick BL, Hunter ML, Harris JC, Tempest V, et. al. Characteristics of child dental neglect: a systematic review. J Dent 2014;42:229–39.
4. Rayman S, Dincer E, Almas K. Child abuse concerns for oral health practitioners. NY State Dent J 2013;79(4):30–4.
5. NSPCC. News Special Understanding Child Trafficking. Spring 2013. Available at: badn.org.uk.
6. Naughton AM, Maguire SA, Mann MK, Lumb RC, Tempest V, Gracias S, et al. Emotional, behavioral, and developmental features indicative of emotional abuse in preschool children. JAMA Pediatr 2013;16:769–75.
7. Nalini PR, Thirunavukarasu MR, Dongre AR. Reports of child abuse in India from scientific journals and newspapers—an exploratory study. Online J Health Allied Sci. 2013;12(4):8.
8. National Population Policy 2000. National Commission on Population. pp. 1–10. Available at: http://healthopine.com/health-care-infrastructure/the-anganwadi-workers-of-india-connecting-for-health-at-the-grassroots (last accessed July 13, 2014).
9. Rural Health Care System—The Structure and Current Scenario in India. Available at: http://mohfw.nic.in/dofw%20website/Bulletin%20on%20RHS%20-%2006%20-%20PDF%20Files/Genesis%2.
10. Hashim R, Al-Ani A. Child physical abuse: assessment of dental students' attitudes and knowledge in United Arab Emirates. Eur Arch Paediatr Dent 2013;14:301–5.
11. Sonbol HN, Abu-Ghazaleh S, Rajab LD, Baqain ZH, Saman R, Al-Bitar ZB. Knowledge, educational experiences and attitudes towards child abuse amongst Jordanian dentists. Eur J Dent Educ 2012;16:158–65.
12. Čukovic-Bagic I, Welbury RR, Flander GB, Hatibovic-Kofman S, Nuzzolese E. Child protection: legal and ethical obligation regarding the report of child abuse in four different countries. J Forensic Odontostomatol 2013;31(1):158-9.

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