

A survey of violence and vulgarity in children television programmes: A content analysis, and assessment of perceptions of parents and children (ViCTiM study)

Ashraf Jahangeer,¹ Manahil Akmal,² Bushra Perveen,³ Maaz Bin Nazir,⁴ Faryal Mustafa,⁵ Bilal Ahmed Khan,⁶ Hafsa Jabeen,⁷ Nighat Mirza,⁸ Hajra Ejaz Khilji⁹

Abstract

Objectives: To quantify the depiction of violence and vulgarity in television programmes for children, and to assess the perception and practices of parents and children about television programmes meant for children.

Methods: We conducted this mixed-methods cross-sectional study in Karachi, Pakistan in the months of August-September 2018, after approval from the ethics review board of Dow University of Health Sciences, Karachi. First, a content analysis of over 102 hours of various television programmes meant for children was performed in the light of the guidelines set out by the World Health Organisation, the United States Federal Communication Commission and the Pakistan Electronic Media Regulatory Authority. Seven trained researchers sampled the children prime time throughout a week, including the weekends, using a structured tally sheet. Subsequently, interviews were conducted with dyad of parent-children from the employees' list of a public-sector university. A questionnaire was also administered to assess the practices and perceptions of the parents-children dyad about the programmes. Data was analysed using SPSS 24.

Results: Of the 173 subjects, 84(48.6%) were parents and 89(51.4%) were children. The mean age of the children was 9.8 ± 3.7 years. Content analysis comprised 6130 minutes, of which 5442(88.8%) had depictions of violence and vulgarity. Depiction of violence and vulgarity was prevalent on television channels that were watched the most, but there was no significant difference in this regard ($p=0.238$). Of the parents, 68(81%) expressed concern over the effect of screen time and content on the mental health of their children.

Conclusion: Television programmes meant for children were found to be inappropriate with seriously high proportion of violence and vulgarity in their contents.

Keywords: Violence, Child health, Mental health, Television, Programme. (JPMA 72: 253; 2022)

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Introduction

Over the last century, excessive use of media has become a crucial public health concern.¹ Humans have a natural tendency towards observational learning² and that is true for children as well. Children tend to mimic what they see often spontaneously and without conscious effort² and that makes them the most vulnerable to the ill-effects of electronic media.³ Hence, the portrayal of violence and vulgarity (VnV) in children's television (TV) content is an issue that warrants much attention on the part of both parents and physicians.⁴

More than 35% of children's average awake time is spent on electronic media,⁵ with TV being the biggest contributor to their total screen-time.⁶⁻⁸ A volume of research has linked media and negative youth behaviours, including aggression, alcohol and tobacco use, and earlier involvement in sexual activities.⁹⁻¹²

On the media, VnV is often depicted in a positive light, with violent and indecent acts often being committed by characters which the children look up to as their role models or superheroes.¹³ A close evaluation of about 10,000 hours of broadcast programming over two years showed that violence was depicted in about 60% of the content and it was most prevalent in children's TV shows.¹⁴ Some of the kids' cartoons contain up to 80 violent acts for each one-hour episode.¹⁵ Before the child reaches adulthood, he will have witnessed 200,000 scenes of violence or aggression on TV shows.^{12,16} Children naturally tend to mimic what they see, and continued exposure to VnV acts moulds their minds in such a way that they are desensitised to violence in their surroundings¹⁷ and they may even adopt such behaviours.¹⁸

Violence, as defined by the World Health Organisation (WHO), is the intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community, that either results in or has a high likelihood of resulting in injury, death, psychological harm, mal-development or deprivation.¹⁹

^{1,8}Department of Community Medicine, ²⁴th Year MBBS Student, ^{3-7,9}5th Year MBBS Student, Dow Medical College, Dow University Health Sciences, Karachi, Pakistan.

Correspondence: Ashraf Jahangeer. Email: ashraf.jahangeer@duhs.edu.pk

Vulgarity, as per the dictionary definition, refers to any act which goes against the standards of propriety, morality or society. It may include nudity, indecent language or gestures, and explicit or implicit sexual content, such as flirting or kissing, substance abuse, and swearing. Many studies have explored the relation between adolescents' TV-viewing habits and their sexual attitudes and preferences, and the results show that TV, being easily available, is not only one of the major informants about sexuality, but also plays a big role in moulding their sexual behaviours.²⁰

Literature shows an association between total screen-hours and negative effects on health, such as later bedtime and sleep disturbances.²¹ In a research carried out on an ethnically diverse community in the United Kingdom, higher TV-time was reported for children of mothers of Pakistani origin.²²

The Pakistan Electronic Media Regulatory Authority (PEMRA) requires that programmes and advertisements targeted for children should not portray violence and should not be misleading or in any way harmful to the children's overall well-being.²³ But one might ask if PEMRA is truly successful in the regulation of TV content for children. The current study was planned to find answer to this question by quantifying VnV depiction TV programmes meant for children, and to assess the perception and practices of parents and children about different children TV programmes.

Materials and Methods

We conducted this mixed-methods cross-sectional study in Karachi, Pakistan in the months of August-September 2018, with due approval from the ethics review board of Dow University of Health Sciences (DUHS). Content analysis of over 102 hours of various children TV programmes was performed. Subsequently, interviews were conducted with dyad of parent-children. Questionnaires were administered both in the university and home settings of the selected participants.

To select a representative sample of TV programmes and channels for content analysis, a pilot study was conducted on commonly watched children TV programmes, channels and their timings for data collection. The identified television channels had round-the-clock functionality and there was no time restriction for any of the selected channels. It was assumed that most of the children watch television after school-hours and consecutively sampled the children prime time from 4-9pm on weekdays, whereas on the weekends prime time slots were assumed to be 9-11am and 5-10pm in line with literature,^{24,25} and matched the data of the Sindh

Education Management Information System (SEMIS)²⁶ and the Annual Status of Education Report (ASER).²⁷

The sample size of content analysis was calculated based on VnV frequency was taken as three seconds per episode minute of risky behaviour.²⁸ Using a single-proportion formula to estimate VnV frequency in children TV programmes by keeping prevalence at 5% (3 sec/60 sec=5%) violence per minute, 1822 minutes of TV programmes at 95% confidence level and 1% margin of error was considered. We were able to sample almost 3.5 times the required minutes of content. The "time" was equally distributed across the whole week so that each day of the week was accounted for in the sample. Without any overlap of real-time programmes being watched, various TV channels and programmes were observed for VnV by all the authors. Programmes having an inbuilt nature of violence and fighting were excluded, such as wrestling and contact sports. Content analysis was done using simple tally sheets and included advertisements and the additional hours of observations made on the weekend. The sample size of parent-child dyad was estimated considering the current demographic estimates of Pakistan with 85% of parents having at least one child.²⁹ By keeping precision 10% and confidence level 95% the sample size was calculated at power >80%.

Two separate questionnaires for children and parents were developed about their practices and perceptions regarding children's TV programmes and their effects on children's behaviour. Parents were sampled using purposive sampling technique from the DUHS premises having at least one child of paediatric age 3-16 years. Parents who agreed to provide written informed consent for their children were given two questionnaires; one for them and the other for their children. The aged <10 years filled the questionnaire with parental assistance. Parents who reported non-availability of TV at home or where the children were absolutely not allowed to watch TV were excluded.

The main outcome was frequency and types of VnV depictions. Other variables included timing of the programme, weekend/weekday programme, channel and programme name, characters' name, duration and habits of watching TV. Timings of the programmes were accounted for confounding and effect modification.

For content analysis a tally sheet was pre-tested and piloted which was used to record various forms of violence and vulgarity (obscene, indecent, profane) as identified by WHO, PEMRA and the United States Federal Communications Commission (FCC),^{19,23,30,31} which

included hitting, showing weapons, grabbing, pushing, threatening, shouting and racism under the heading of violence. Kissing, indecent dress, indecent language, romance and indecent gesture were classified under vulgarity. Besides, it should be noted that the definition and measurement of vulgarity depends on the contemporary community standards and the three-prong test suggested by the US Supreme Court in its famous statement "I know it when I see it".²⁹

The interview from children and parents consisted of simple questions about daily routine, hours of watching television, preference of programmes and behavioural effects on children and their practices to reduce such effects. Each of the questionnaire required 10 minutes to be filled.

Data was inspected, cleaned, transformed and modelled according to the defined objectives. It was processed using EpiData 3.0 and was later analysed using SPSS 24. Microsoft Excel 2010 was also used to create graphs and charts, where appropriate. Frequency of different study variables was calculated. Descriptive analysis was performed for socio-demographic and other variables. The overall frequency of VnV was presented as rate (count per minute). Chi-square test of proportion was used to compare the frequency of VnV among different channels/programmes. Kruskal Wallis test was applied to compare the rate of VnV among various scheduled timings of programmes. Post-hoc analysis for pairwise comparisons between telecast timings was carried out using Dunn test where appropriate. $P \leq 0.05$ was considered significant.

Results

Of the 173 subjects, 84(48.6%) were parents and 89(51.4%) were

children. The mean age of the children was 9.8±3.7 years, and 53(60%) of them were boys. Content analysis comprised 6130 minutes, of which 5442(88.8%) had VnV depictions. Lifetime exposure up to the age of 18 years in Karachi was more than 600,000 VnV depictions during children's TV programmes for an average watching duration of two hours per day.

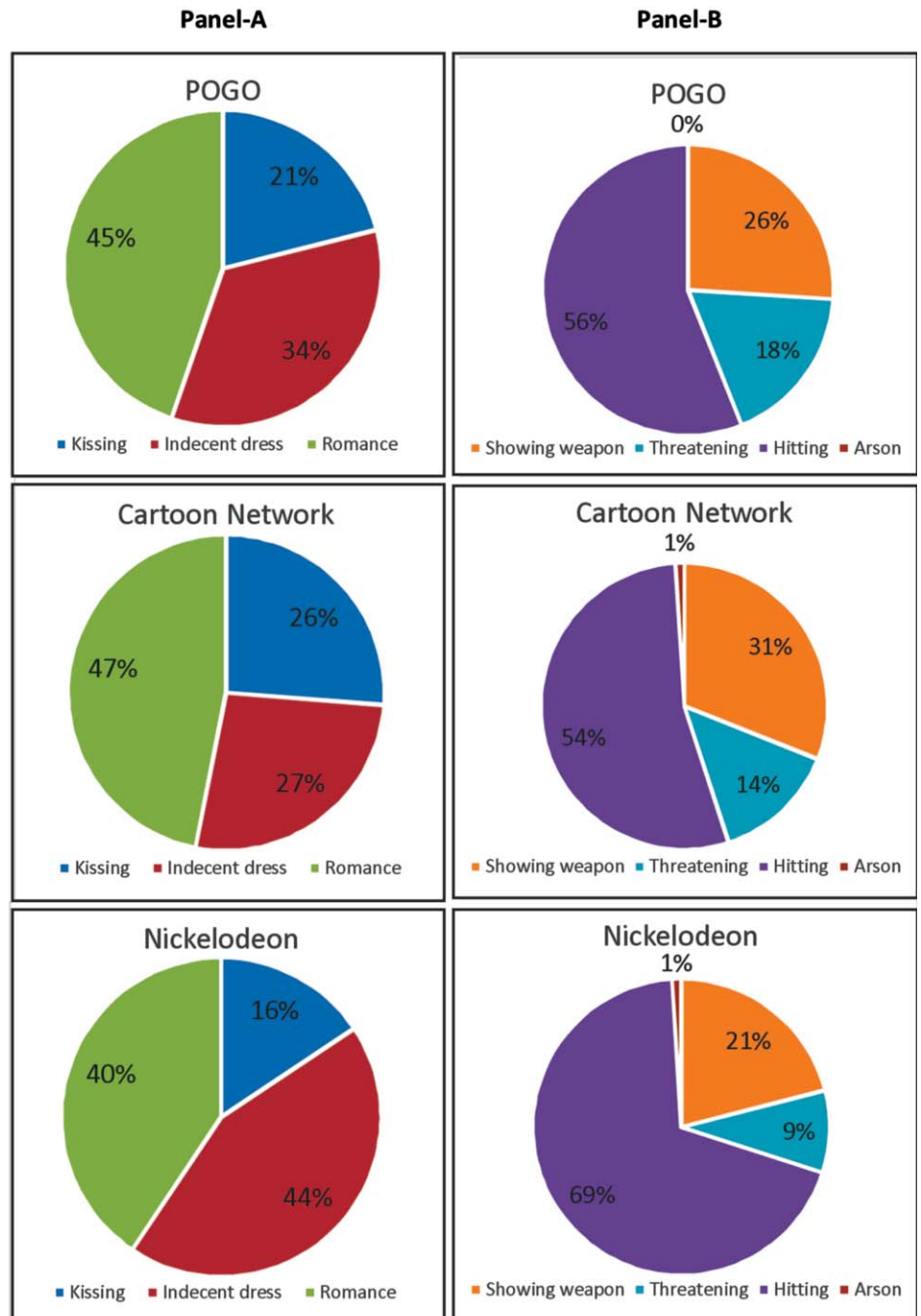


Figure-1: Panel pie chart showing the frequency of vulgar depictions in children TV programmes on the selected TV channels (n=6130 minutes of TV contents): panels showing (A) vulgar depictions (B) violence depictions.

Table-1: Prevalence of violence and vulgarity at different time slots of children television programmes in a cosmopolitan city of Pakistan (n=6130 minutes of content).

Schedule of the content analysis	Duration in minutes	Violence and vulgarity (VnV) in programmes and adverts	VnV/minute (*rounded off)	Showing weapon	Grabbing	Pushing	Threatening	Shouting	Hitting	Racism	Arson	Conspiracy	Kissing	Indecent dress	Indecent language	Romance	Indecent gestures	Violence in adverts	Vulgarity in adverts
	n	Rate/minute	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n
Total	6130	5442	1	884	325	291	441	694	1905	8	27	20	55	71	88	105	226	271	31
9am	30	55	2	3	1	4	3	8	21	0	0	0	3	3	0	3	1	4	1
10am	300	260	1	28	18	34	15	24	69	1	0	0	9	8	6	7	25	15	1
4pm	1065	918	1	171	53	34	74	98	325	0	17	2	9	15	18	13	25	51	13
5pm	1020	674	1	166	31	23	49	39	286	0	1	0	4	5	9	5	22	31	3
6pm	1110	1219	1	227	76	54	94	122	417	2	0	18	21	20	19	36	41	64	8
7pm	1355	1304	1	112	68	100	108	307	471	2	3	0	5	11	19	20	55	21	2
8pm	710	435	1	60	39	17	52	33	140	1	6	0	2	3	17	8	27	27	3
9pm	480	434	1	87	23	19	38	59	125	2	0	0	1	4	0	10	30	36	0
10pm	60	143	2	30	16	6	8	4	51	0	0	0	1	2	0	3	0	22	0

VnV: Violence and vulgarity.s

Table-2: Parents' awareness, attitude and actions about their children's television watching routines (n=84).

Items	Options	f	%	95% CI for proportion	
Time at which children watch TV*:	9am-12am	7	8.3	3.8,	15.7
	2pm-5pm	28	33.3	23.9,	43.8
	6pm-9pm	48	57.1	46.5,	67.3
	9pm-11pm	20	23.8	15.7,	33.7
How many hours max?	1-2 hours	42	50.0	39.5,	60.5
	2-4 hours	37	44.0	33.8,	54.7
	4-6 hours	5	6.0	2.3,	12.6
What channels do they watch?	Cartoon Network	51	60.7	50.1,	70.7
	POGO	13	15.5	9.0,	24.3
	NICK	4	4.8	1.6,	10.9
	Disney	13	15.5	9.0,	24.3
	Baby TV	1	1.2	0.1,	5.4
	See TV	2	2.4	0.5,	7.4
In your opinion what is the utility of these programs?	Healthy for their mental health	17	20.2	12.7,	29.7
	Entertaining for children	52	61.9	51.3,	71.7
	Showing Violent Acts	7	8.3	3.8,	15.7
	showing Vulgar and Indecent Content	1	1.2	0.1,	5.4
	Very little indecency, so no issue	7	8.3	3.8,	15.7
Are there any programs you don't want your children to watch?	Yes	63	75.0	65.0,	83.3
	No	21	25.0	16.7,	35.0
How do you prevent your children from watching these programs?	Child Lock	10	11.9	6.3,	20.1
	By scolding them	31	36.9	27.2,	47.5
	By keeping an eye on them	22	26.2	17.7,	36.3
	Discourage them with proper explanation	21	25.0	16.7,	35.0
Is violence and vulgarity one of the reasons to stop them?	Yes	71	84.5	75.7,	91.0
	No	13	15.5	9.0,	24.3
Do you know about child lock on TV?	Yes	46	54.8	44.1,	65.1
	No	38	45.2	34.9,	55.9
Do you look after stuff your children watch on TV?	Yes	64	76.2	66.3,	84.3
	No	20	23.8	15.7,	33.7
Do you leave you child alone with TV?	Yes	49	58.3	47.7,	68.4
	No	35	41.7	31.6,	52.3
Have you ever properly analysed TV content for their age appropriateness?	Yes	57	67.9	57.4,	77.1
	No	27	32.1	22.9,	42.6
Do you think children learn from TV?	Yes	60	71.4	61.2,	80.2
	No	24	28.6	19.8,	38.8
Do you feel that TV violence plays role in anxiety in children?	Yes	68	81.0	71.6,	88.2
	No	16	19.0	11.8,	28.4

Multiple response variable totals are >n=84; CI: Confidence Interval.

Table-3: Children's choices and television-watching habits in a cosmopolitan city of Pakistan (n=89).

Items	Options	f	%	95% CI for proportion		
What do you do when you get back home?	Sleep	6	6.7	2.9,	13.4	
	Eat and then sleep	35	39.3	29.7,	49.7	
	Study	13	14.6	8.4,	23.0	
	Watch TV	17	19.1	12.0,	28.2	
	Play	18	20.2	12.9,	29.4	
Do you like watching TV?	Yes	78	87.6	79.6,	93.3	
	No	11	12.4	6.7,	20.4	
What time of the day do you watch TV?	Morning (before school)	1	1.1	0.1,	5.1	
	Afternoon (after school)	22	24.7	16.7,	34.4	
	Evening (after homework)	42	47.2	37.0,	57.5	
	At night	24	27.0	18.6,	36.8	
How many hours of the day do you watch TV daily?	2 hours	63	70.8	60.8,	79.5	
	3 hours	14	15.7	9.3,	24.3	
	4 hours	8	9.0	4.3,	16.2	
	5 hours	4	4.5	1.5,	10.3	
	How many hours do you watch TV on weekends?	2 hours	25	28.1	19.6,	38.0
	3 hours	22	24.7	16.7,	34.4	
	4 hours	28	31.5	22.5,	41.6	
	5 hours	14	15.7	9.3,	24.3	
	Which TV channel do you like to watch the most?	Cartoon Network	36	40.4	30.7,	50.8
		Nick	8	9.0	4.3,	16.2
Pogo		13	14.6	8.4,	23.0	
Disney		14	15.7	9.3,	24.3	
Any other?		18	20.2	12.9,	29.4	
Which character do you admire the most?	Chota bheem	16	18.0	11.1,	26.9	
	Doremon	16	18.0	11.1,	26.9	
	Mr. Bean	17	19.1	12.0,	28.2	
	Avatar	2	2.2	0.5,	7.0	
	Ben	11	12.4	6.7,	20.4	
	Sponge bob	4	4.5	1.5,	10.3	
	Tom & Jerry	23	25.8	17.6,	35.6	
	Do you want to become a character you like?	Yes	37	41.6	31.7,	51.9
No		52	58.4	48.1,	68.3	
Does anyone accompany you watching TV?	Mother	10	11.2	5.9,	19.0	
	Father	7	7.9	3.6,	14.8	
	Sister	35	39.3	29.7,	49.7	
	Brother	21	23.6	15.7,	33.2	
	Any other?	16	18.0	11.1,	26.9	

Of the 6130 minutes content analysis, 'hitting' was the most frequently displayed violent act (count: 1905), while 'racism' was the least noted (n=8). VnV in programmes and advertisements were the highest on Cartoon Network (count:2776) and the lowest on Baby TV (count: 3). Of all the programmes, 'Tom and Jerry' had the most violent and vulgar acts (count: 1188), while 'Tik Tak Tail' had the least (count: 7). In terms of timings, the 6-7pm slot had the highest broadcast of VnV entertainment (count: 2523). Despite a high frequency in a particular time slot, the rate of VnV was pervasive throughout the content analysis and there was no statistically significant difference with respect to the programme telecast timings ($p=0.238$) (Table-1). Also, there were no significant difference in the proportions

of the common portrayals of violence ($p=0.137$) and vulgarity ($p=0.128$) on three selected TV channels (Figure).

Of the 84 parents, 48(57%) reported 6pm-9pm as the most common time when children watched TV, while 7(8.3%) reported that their children watched TV at 9-12am. Further, 42(50%) parents reported that their children watched TV >2 hours a day; 51(61%) confirmed Cartoon Network as the highly watched TV channel; 52(62%) thought that programmes on TV were a source of entertainment; 17(20.2%) thought that they were healthy for children's mental health; 63(75%) considered certain programs labelled under children programmes were not suitable for their children; and 71(84.5%) said VnV was the reason they

restricted their children's access to programmes meant for children.

Of the sample, 31(36.9%) parents kept an eye on their children; 22(26.2%) restricted their children from watching any obscene show; 46(54.8%) were aware about the child's lock on TV; 64(76.2%) stated that they 'look after' the TV stuff their children watched; 57(67.9%) mentioned that they 'analyse and monitor' what their children watched; and 68(81%) agreed that the programmes watched by their children did affect their mental health and may cause anxiety issues as well (Table-2).

Of the 89 children in the sample, 63(71%) spent about 2 hours watching cartoons on TV, while on the weekends, 28(31.5%) children reported a two-fold increase in TV-watching duration. The Cartoon Network was reported as the most-watched channel by 36(40.4%) children. Overall, 88(98.9%) children watched TV after school in the afternoon and evening hours; 17(19.1%) started watching TV right after school without bothering about eating, sleeping, playing or doing homework; 78(88%) liked watching TV while 10(11%) watched it to pass time and due to unavailability of other recreational activities Tom and Jerry the most popular cartoon characters with 23(26%); 52(58.4%) said they did not want to become the cartoon character they liked; and 33(37.1%) were accompanied by some adults while they watched TV (Table-3).

Discussion

To our knowledge, the current study is the first of its kind in Pakistan.

The study found an alarming frequency of violence and sexual depiction in children's TV programmes. In the past 20 years, there has been a boom in the media industry not only in Pakistan but all over the world. As a viewer, a child has more options on television channels and on other electronic modalities to entertain themselves. The media industry has a great impact on children's behaviours and beliefs which ultimately affects their lives in general.¹ Without going into details of utility and appropriateness of the digital content, there is certainly information overload for the viewers. Similar to this study, the depiction of violence and sexual content in children's TV programmes has been documented earlier.^{1,2,28} Various guidelines have already defined the children's programme boundaries, but literature shows that these are not being followed^{19,23,30,31} Data suggests that the average child and/or adolescent watch two hours of TV daily and, thus, 14 hours are spent watching TV weekly.¹⁷ The current study also had similar findings.

One study reported that after watching 'Tom and Jerry', 55% children liked to fight with their classmates.²⁵ The

phenomenon is further complicated by the fact that such programmes are being liked by the viewers. The current study suggests that children prime time is flooded with VnV depictions which can be regarded inappropriate by any definition and on any scale. It is an established fact that humans have an inborn tendency to mimic what they see.² Considering the demands and vulnerability of growing brains and bodies of the children, such digital content can have detrimental short-term (arousal, priming, mimicry) and long-term (observational learning, desensitisation, enactive learning) effects.¹

Studies have shown that viewers underestimate the behavioural consequences of inappropriate television programmes, like the parents who often are neither familiar with the content their child watches nor do they control the TV-hours.⁸ This was contrary to the findings of the current study. Surprisingly, just a few programmes showed parental guidelines. Popularity of programmes, such as 'Tom and Jerry', 'Ben10' and 'Chota Bheem' is clear to all, but still have not been classified. With an absence of intervention by regulatory authorities, the current study showed that there was a state of chaos in terms of high frequency of VnV and absence of disclaimer for viewer discretion/parental guidance related to digital entertainment meant for children.

PEMRA has the mandate to safeguard the viewers, especially the children. It is supposed to do much to ensure that the viewers are protected against content that is harmful to the Pakistani culture, and also to bring in more children-friendly cartoon programmes in the future. However, as things stand, Western channels are broadcasting more VnV content, with no regard for our cultural norms.

Conclusion

Violence and vulgar (VnV) content in TV programmes meant for children was pervasive and not properly screened by the regulatory authorities. There was a massive lifetime exposure of children to VnV depictions. There is an urgent need for removing inappropriate content from children TV programmes.

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