



CHILDREN'S AWARENESS OF MEDICINES, DRUG COMPLIANCE AND HEALTH PROTECTION DURING COVID 19 PANDEMIC: A DETAILED CROSS SECTIONAL STUDY

Pharmacology

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ABSTRACT

OBJECTIVES: Nobody is refrained from the use of medications in today's times, not even kids. The objective of this study is to focus on the knowledge and awareness level, perception, of children of primary and secondary grade towards medicines, prevention of Infections and Diseases and drug compliance. **METHODS:** This descriptive, cross sectional observational study was done amongst the kids of North West Rajasthan, India from August 2020 to October 2020 via an online questionnaire. A sample size of 100 kids, 50 each from Primary and Secondary grade was chosen for the study. The data was entered in Microsoft Excel and was statistically analysed. **RESULTS:** Results are outcomes of various questions put up to conduct detailed analysis of kids' awareness and medicinal knowledge, drug preferences, factors influencing and attitude related to hygiene, safety and protection from Covid 19 infection. **CONCLUSION:** Kids are the young budding physicians and their childhood beliefs and perceptions might affect their behaviour and decisions in adult lives. Parents and schools can play a great role through educational programs. It's well said, "Children are like wet cement, whatever falls on them, leaves an impression."

KEYWORDS

Primary Grade Kids, Secondary Grade Kids, Awareness, Medicines, Health Protection, Covid 19 Pandemic

INTRODUCTION

Kids and students are primary harbingers of our society. Their proper education and knowledge in today's pandemic times is of utmost importance to prevent infections and diseases in society. Their awareness level is to be constantly enhanced to spread further the means and methods of controlling diseases and as how to apply the hygienic and self preventive measures to be followed as a mandatory habit in day to day lives. It's well said, "Instead of reforming the elders, work on kids as they are the future of society."

Children form opinions and perception about medications, these beliefs and opinions often continue in their later life. As kids grow, they acquire knowledge from family, school and especially they have a peculiarly curious interrogative mindset towards diseases, their cure and medicines. They want to know all, they are the young budding physicians and their early training might affect their behaviour in adult lives.¹ Many articles^{1,2,3} have lighted the need of proper communication regarding medicines, attitude towards doctors, hospitals which would halt the development of misunderstandings and misbeliefs among the younger generation.

This study focuses on the knowledge and attitude of primary and secondary grade kids towards medicines, drug compliance and prevention of Infections and Diseases like Covid 19 pandemic.

MATERIALS AND METHODS

The study is a detailed cross sectional study done via Online Questionnaire prepared in Google forms application. A sample size of total 100 students (calculated with a total population of 150 students from 5 classes, with confidence interval 95% and $\pm 5\%$ error margin) was taken for the study. The study was conducted from August 2020 to October 2020. Then forms were closed by switching off the responses. Prior informed consent was obtained in the form of Question 1 from students' parents or guardians. The data was analysed using excel sheets. Different variables like age, class, school, sources of medicine and covid 19 information, assessment questions for general knowledge and safety, preventive measures and behaviour towards doctors, hospitals and medicines were studied. Two detailed online questionnaires were prepared in Google forms, separate each for primary grade students of classes 4th and 5th, and secondary grade students of class 6th, 7th and 8th, and were distributed via email and whatsapp groups of different schools.

Division of Questionnaire.

Each Questionnaire was divided in broadly four parts, first part comprising of informed consent filled by the parents or guardians (mandatory question), second part covering the demographic characteristics of kids, third part covering their general knowledge, attitude regarding medicines, doctors, general health and self preventive measures and fourth part regarding their current knowledge and measures to fight Corona infection. Content validity of the questionnaire was checked and determined by expert's opinion.

Study Population.

Inclusion criteria.

Total no of 100 children (from primary and secondary grades) of age group 9 to 14 years participated in the study who filled the informed consent and submitted the form in a duration of 3 months. They were divided in two groups:

- 1) Group A- 50 youngsters from class 4th and 5th (primary grade)
- 2) Group B- 50 youngsters from class 6th, 7th and 8th (secondary grade)

Exclusion Criteria.

All the children who did not receive online form, who did not submit responses in a duration of 3 months, who did not fill informed consent and who were not in selected classes of study.

Statistical analysis.

Prevalence of different results were reported as ratio and percentages after data was analysed in Microsoft Excel.

RESULTS

Separate questionnaires for Primary and Secondary grade kids yielded separate results.

Primary grade kids.

Amongst 50 primary grade children, 21 kids(42%) were 9 years old, 21 kids(42%) were 10 years old and 8 (16%) children were 11 years old. 20(40%) kids were from 4th grade and 30 (60%) students were from 5th grade.

As far as knowledge of names of different dosage forms was tested, all kids knew about injection, 45 kids(90%) knew about tablets while 5 kids(10%) did not respond. 41 kids(82%) knew about Capsule, 9 kids(18%) had no idea about it, 41 kids(82%) knew about syrup, 4 kids(8%) did not know, while 5 kids(10%) did not respond.

Kids behaviour was analysed by asking them whom did they run to in times of hurt and injury, and in response, 37(74%) kids preferred to go to their mother, 8 (16%) kids had a preference for their fathers, while 5 kids(10%) did not respond.

An insight was taken into kids beliefs and perceptions by asking them about their fears. When asked if they fear blood, its sight or thought, 18 kids(36%) agreed, while 32 kids(64%) did not fear at all. When asked if they fear dettol, an antiseptic for wounds, 13 kids(26%) agreed, 32 kids(64%) had no fear, while 5 kids (10%) did not respond. When asked about the fear of a doctor, 28 kids (56%) agreed, 17 did(34%) not fear doctor or nurse and 5 kids(10%) did not respond. Last in this series, when asked if they cry while taking medicines, 29 kids (58%) agreed, 16 kids(32%) admitted no crying while taking medicines and 5 kids(10%) did not respond.

A quick quiz (YES/NO questions) was put up to the kids to check their knowledge of basic medicines at school and home. Chloroxylonol

(Dettol, antiseptic) was known by 45 kids(90%), 5 kids(10%) had no idea about it. Bacitracin Zinc-Polymyxin B(Betadine) was known by 32 kids(64%), 18 kids(36%) had no idea about it. Acetaminophen (Paracetamol) was known by 32 kids(64%), 18 children(36%) did not know about it. When inquired about Framycetin (Soframycin), 28 kids(56%) knew about it while 22 kids(44%) had no idea about it. 38 children(76%) had knowledge about Calcium and Vitamin supplements and 12 kids(24%) did not know about it. 29 youngsters(58%) knew about Iron supplements and 21(42%) of them did not know about it.

Juvenile sensitivity and awareness level was tested by asking about the medicines taken by their parents and grandparents, 37 kids (74%) admitted "no medicine" intake by their mothers, while 13 kids(26%) agreed that their mother takes tablet. 21 children(42%) said their father does not take any medicine, while 25 kids(50%) agreed that their father takes tablet. 33 kids (66%) admitted intake of tablet by their grandparents and 17 kids (34%) agreed that their grandparents take some capsule.

Then some general questions were put up to the kids. 41 kids(82%) agreed to hospital visits during sickness, 4 kids(8%) disagreed and 5 kids(10%) did not respond to it. Regarding knowledge of expiry date of medicines, 41 kids(82%) knew about it while 9 kids did not know about it.

Kids' choice of medicines was connected to the flavour of medicines. 16 kids(32%) found taste of no medicine good, 4 kids (8%) said that few medicines taste good specially like cough syrup, vitamin c and calcium while 17 kids(34%) did not respond. 12 kids(24%) said that all medicines are bad in taste, 4 kids(8%) disliked taste of few medicines especially like some tablet, syrup and Ibuprofen 100 mg and paracetamol 162.5 mg combination (ibugesic plus), and 22 kids(44%) did not respond to it.

Lastly a simple Corona Quiz was put up to the kids, which apart from 5 kids (10%) who left it totally unattempted, 45 children(90%) answered correctly that they knew about Corona infection, they wash hands regularly, they used to put masks regularly and keep sanitisers with them.

Secondary grade kids.

This group consisted of 50 kids, amongst which 14 kids (28%) were of

11 years, 22 kids (44%) were of 12 years of age and 14 kids (28%) were of 14 years of age. There were 21 boys(42%) and 29 girls(58%) who participated in this study. 7 kids (14%) belonged to 6th standard, 21 kids(42%) belonged to 7th standard, 22 kids(44%) belonged to 8th standard. 29 students(58%) were from Delhi Public schools while there were 7 children(14%) each from Bikaner boys school, Shri Jain Public School and Senior Secondary School.

A set of questions were asked to test medicinal knowledge of kids. 29 kids(58%) saw First Aid Box firstly at both home and School, while 21 kids(42%) saw it at school only. Different things and medicines noticed by the kids are listed in the table.(TABLE 1)

TABLE 1- LIST OF THINGS SEEN BY SECONDARY GRADE KIDS IN THE FIRST AID BOX (n=50)

WHAT DID YOU SEE IN FIRST AID BOX	KIDS' RESPONSES- YES	KIDS' RESPONSES- NO
BANDAGE	43	7
PLASTER	21	29
SCISSORS	36	14
SAFETY PINS	22	28
GAUZE	22	28
BANDAGE ROLL WHITE	43	7
COTTON	43	7
DETTOL	43	7
DISPOSABLE GLOVES	14	36
SANITISER	21	29
WIPES	22	28
THERMOMETER	36	14
TAPE	29	21
ANTISEPTIC CREAM	43	7
ANTIALLERGIC MEDICINE	7	43
COUGH MEDICINE	15	35
PAIN KILLER MEDICINE	36	14
VICKS/STREPSILS(TH ROAT LOZENGES)	22	28

Further, kids' knowledge was tested by "Name one medicine" set of questions for different basic ailments. Its details are in Table 2. (TABLE 2)

TABLE 2- "NAME ONE DRUG" ANSWERS FOR DIFFERENT AILMENTS BY SECONDARY GRADE KIDS (n=50)

AILMENT	DRUGS	BRAND NAMES	MANUFACTURERS	% OF KIDS RESPONSES
COUGH	Paracetamol+Caffeine+Phenylephrine	D-cold Total	Paras pharmaceuticals Ltd.	15 kids(30%)
	Cetirizine+Paracetamol+Phenylephrine	Cheston cold	Cipla Ltd	14 kids (28%)
	Chlorpheniramine maleate + Dextromethorphan hydrochloride	Rexcof syrup	Cipla Ltd	7 kids (14%)
	No response			14 children (28%)
VOMITING	Ondansetron	Ondem tablet Emeset	Alkem laboratories, Ltd Cipla Ltd	15 kids (30%)
	Domperidone	Domstal	Torrent Pharmaceuticals Ltd)	7 kids (14 %)
	Bismuth Subsalicylate	Pepto Bismol	Procter and Gamble manufacturing company	7 kids (14 %)
	Doxylamine succinate	Unisom	Chattem, Inc	7 kids (14 %)
	No response			14 kids(28%)
SERIOUS WOUNDS AND INJURY	Herbal combination ointment of Azadirachta Indica(Neem), Borax(tankan), Sulphur(gandhak) in oil base	Achyut malhalm	Ayurvedic company, India	8 kids (16%)
	Benzyl nicotinate+Heparin combination ointment	Thrombophob	Zydus Cadila	7 kids(14%)
	Homeopathic analgesic	Heel Inc Traumeel ointment	Medinatura	7 kids(14%)
	Chloroxylonol	Dettol	Reckitt Benckiser	7 kids(14%)
	Neomycin/Polymyxin B ointment	Bacitracin/Baciwell ointment	Wellonpharma, India	7 kids(14%)
	Ciprofloxacin ointment	Ciplox ointment	Cipla Ltd	7 kids(14%)
	No response			7 kids (14%)
MILD INJURIES	Neomycin/Polymyxin ointment	Bacitracin/Baciwell ointment	Wellonpharma, India	8 kids (16%)
	White petrolatum-Mineral oil combination	Dermalene	Eumed healthcare, India	7 kids(14%)
	Metronidazole+Povidone Iodine ointment	Drez ointment	Stedman pharmaceuticals pvt ltd.	7 kids(14%)
	Cefpodoxime proxetil tablet	Swich tablet	Alkem laboratories Ltd	7 kids(14%)
	Chloroxylonol	Dettol	Reckitt Benckiser	7 kids(14%)
	No response			7 kids(14%)

BLEEDING FROM INJURY	Chlorhexidine gluconate + Cetrimide combination liquid	Savlon	ITC Ltd	8 kids(16%)
	bioflavonoids +herbal extracts combination	Amystop-G capsules	Almil Pharmaceuticals, India Ltd.	7 kids (14 %)
	Chloroxylonol	Dettol	Reckitt Benckiser	7 kids (14 %)
	Tranexemic acid	Tranaxa 500 tablets	Macleods pharmaceuticals, pvt. Ltd.	7 kids (14 %)
	No response			21 kids (42%)
ANTISEPTIC MEDICINE	Chloroxylonol	Dettol	Reckitt Benckiser	14 kids (28 %)
	Azithromycin	Azee 500	Cipla Ltd	8 kids (16%)
	Diclofenac+Serratiopeptidases	SN 15 tablet	Serum Institute of India Ltd	7 kids (14%)
	Povidone Iodine	Betadine ointment	Win Medicare Pvt Ltd	7 kids (14%)
	No response			14 kids (28%)
ALLERGY	Pheniramine	Avil 50 mg tablet	Sanofi India Ltd.	22 kids (44%)
	Cetirizine	Cetzine tab 10 mg	Dr Reddy's Laboratories Ltd.	7 kids (14 %)
	Loratadine	Claridin 5 mg tab	Morepen laboratories Ltd	7 kids (14%)
	No response			14 kids (28%)
HEADACHE	Aspirin/Acetylsalicylic acid	Disprin	Reckitt Benckiser	14 kids (28%)
	Paracetamol	Paracetamol Crocin	Makers Laboratories Ltd. Glaxosmithkline consumers Healthcare	14 kids (28%)
	Paracetamol+Caffeine+Phenazone	Dart	Juggat Pharma	8 kids(16%)
	Paracetamol, Propyphenazone and Caffeine	Saridon	Piramal Enterprises	7 kids(14%)
	No response			7 kids (14%)
EYE MEDICINE	Carboxymethylcellulose	Fresh tears eye drops	Adventus Laboratories India Pvt Ltd	8 kids(16%)
	Mixture of 20 herbs	Itone eye drops	Dey's medicals	7 kids (14%)
	Ciprofloxacin	Ciplox eye drops	Cipla Ltd	7 kids (14%)
	Povidone Iodine ointment	Betadine	Win medicare Pvt Ltd	7 kids (14%)
	No response			21 kids(42%)
PERIODS MEDICINE	Tampons	Periods made Easy	Sirona hygiene Pvt Ltd	7 kids(14%)
	Dicyclomine + Mefenamic acid	Meftal spas tablet	Blue cross Laboratories Ltd	7 kids (14%)
	No response			36 kids(72%)
BURNS	Herbal medicine	Shiv shakti malham	Local manufacturers, Bikaner, Rajasthan, india	8 kids(16%)
	Herbal medicine	Vicco Turmeric skin cream	Vicco Laboratories	7 kids(14%)
	Lidocaine	Alocaine	Alembic Pharmaceuticals Ltd.	7 kids (14%)
	Povidone Iodine ointment	Betadine	Win medicare Pvt Ltd	7 kids (14%)
	No response			21 kids(42%)

When asked about sources of medicinal information, 25 kids (50%) mentioned School, home and books, 8 kids (16%) mentioned books and newspapers, 12 kids(24%) mentioned books, 5 kids(10%) answered home .

Some more questions were asked to be answered as YES/ NO options as illustrated in the given table (TABLE 3)

TABLE 3-GENERAL HEALTH QUESTIONS ASKED TO THE SECONDARY GRADE KIDS (n=50)

QUESTION	KIDS' RESPONSES YES	KIDS' RESPONSES NO	NO RESPONSE
Do you know about Prescription?	43 kids (86%)	7 kids (14%)	
Have you bought Medicine from shop?	50 kids(100%)		
Have you ever been admitted to the hospital?	21 kids(42%)	29 kids (58 %)	
Can you make a first aid box?	43 kids (86%)	7 kids (14 %)	
Do you know any doctor's phone number?	36 kids (72%)	7 kids (14 %)	7 kids (14%)

Kids were asked to name few diseases they knew or have heard about, their responses are given in table below (TABLE 4)

TABLE 4- LIST OF DISEASES KNOWN BY SECONDARY GRADE KIDS (n=50)

NAME DISEASES YOU KNOW	NO OF KIDS RESPONSES	%
MALARIA, TYPHOID, DENGUE	7	14
DENGUE, MALARIA	7	14
HEADACHE , ALLERGY	7	14

COVID 19	7	14
COVID, ARTHRITIS, CHICKENPOX, DENGUE, MALARIA	8	16
CORONA,DENGUE,MALARIA, IMPETIGO, TYPHOID, CHICKEN POX, RABIES, SWINE FLU, AVIAN FLU, LARVA MIGRANS, LEPTOSPIROSIS, TOXOPLASMOSIS	7	14
NO RESPONSE	7	14

Kids were asked with whom do they visit the doctor or physician, and their responses were as follows:(Fig 1)

COUNT and %

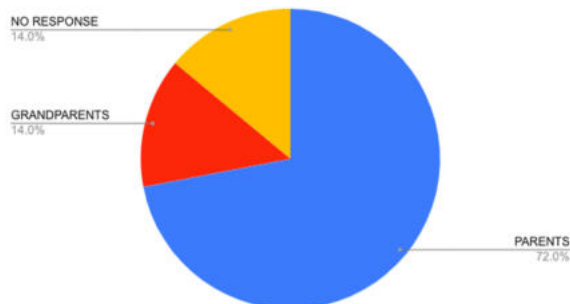


FIGURE 1-WITH WHOM DO KIDS OF SECONDARY GRADE GO TO DOCTOR? (n=50)

Lastly a Corona quiz was put up to the kids, 100% kids knew Corona originated in China, 100% kids agreed to put masks on regularly, keep sanitisers with them, practice hand washing regularly. Various details about their knowledge was tested by separate questions. Kids were asked how many seconds should one wash hands as a rule to avoid

spread of Corona infection and the results were as shown in the figure(Fig 2)

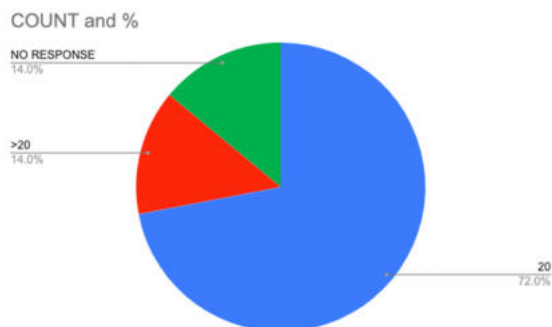


FIGURE 2-FOR HOW MANY SECONDS DO SECONDARY GRADE KIDS HAND WASH TO PREVENT CORONAVIRUS INFECTION (n=50)

Regarding the knowledge of Sanitisers names, variety of responses were obtained: (Fig 3)

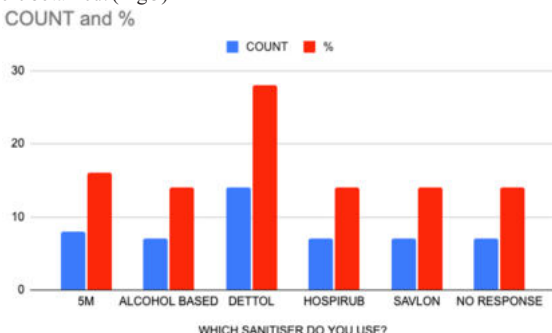


FIGURE 3- DIFFERENT SANITISERS USED BY THE SECONDARY GRADE KIDS (N=50)

Kids were asked to name the mask they use and various responses were obtained(Fig 4)

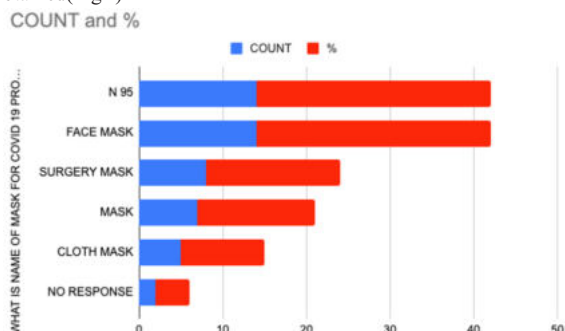


FIGURE 4-DIFFERENT MASKS USED BY THE SECONDARY GRADE KIDS(n=50)

As far as knowledge of kids is concerned regarding medicine name for Covid 19 infection, responses obtained were as follows: (Fig 5)

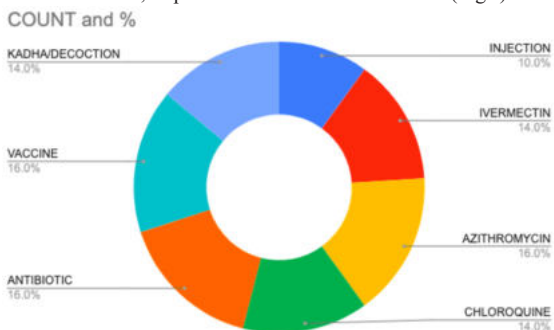


FIGURE 5- "NAME MEDICINE FOR CORONAVIRUS INFECTION" RESPONSES BY SECONDARY GRADE KIDS (n=50)

100% kids were aware and well known to the terms like Ayurveda and Homeopathy, the Alternative medicinal streams .

DISCUSSION

The kids were of the age group 9 to 14 years old, and from classes 4th, 5th, 6th, 7th and 8th.

Firstly, Primary grade kids were checked for their knowledge of dosage forms, their attitude and behaviour when hurt, what are their fears, have they heard about basic medicines used at school and at home, how aware and sensitive are they to their surroundings, do they know about basic steps and precautions to be followed regarding safety, their choice of flavour in medicines and lastly a short Corona quiz was taken.

As far as knowledge of Dosage forms is concerned, kids knew maximum about injection and lesser about tablet, capsule and syrup in descending order, its because injection is the most dreaded one amongst these. Maximum kids seek mother's aid when hurt, this shows a sign of less paternal involvement with kids as far as family set up is concerned. Most of the kids had little or no fear of Blood, its thought, sight, etc as well as of dettol, this shows that primary grade kids are much aware and brave nowadays compared to old times when these things were dreaded by the kids. Credit goes to more exposure to news, television, magazines and books. Majority of kids knew about antiseptics, basic analgesics, multivitamin supplements , which is a satisfactory indicator of their knowledge and vigilance level at this tender age.

All the kids were very well known of the type of medicine taken by their parents and grandparents, showing a measure of love and concern for elders in the family. Maximum kids had a well established mindset of visiting hospitals when sick. Most of them had heard about expiry date of medicine and many knew its importance also, this shows that they are less prone to medicine hazards and an indicator of high safety level. These results matched the study done in Jordan³. This result is not matching to the study by Pilar⁴ where kids' knowledge of medicines was not satisfactory. In the study by Pilar⁴, kids had a little medicinal knowledge and exposure making them more prone to diseases and infections. Majority of kids had an apprehension of doctors/physician, this matches the study by Pilar⁴, where kids view doctor as an authority of medicine, a positive approach for implementing educational programs⁴. Children admitted that they cry while taking medicine, which is actually a very normal kid behaviour, what else can be expected out of these tiny tots! This result matches the study by Sharaideh et al⁵. When it comes to kids, medicine taste judgement is unavoidable question, Their basic interests and preference of medicine is related to flavour and colour of medicine⁶, taste alters kids perception and belief about medicine, that's the fun of childhood, these tastes last long in the subconscious mind and set an adult attitude for medicines too, almost half of the kids admitted that medicines are medicines, and do not taste good while few liked the taste of cough syrups, chewable calcium tablets and Vitamin C capsules. A strong childhood thought is that a good medicine ought to be tasty and coloured, should be reasonable and easily available⁵. These factors play a strong role on drug compliance for kids both emotionally and psychologically⁴. Corona quiz response⁶ was satisfactory, all responses received were correct and showed a great awareness of the current pandemic situation amongst kids.

Separate questionnaire was put up for kids of higher education level. They had their own set of beliefs and knowledge, this adolescence age is a very crucial period as many thoughts turn to strong medication beliefs which may be carried on later in adult life and affect drug compliance in several ways⁷. Amongst secondary grade children, Female responses were more than male responses, Questions differed according to the age group, more detailed and mature knowledge was sought for. Child's age is an important influencing factor for building child's belief system, drug compliance and these in turn affect recovery from medicine also.⁴

Maximum responses were from 7th and 8th grade. At this age children gain a good knowledge about first aid as shown by several studies^{8,9}. Maximum kids saw first aid box at their schools as well as homes and a lot many things were recollected by the kids when asked about contents of first aid box. When asked to name one drug for different clinical conditions, many kids enthusiastically replied with lot many options, most of them were correct while only a few were a mismatch⁸.

First aid knowledge and training should strictly be a part of school curriculum. A great surprising fact that came to my knowledge during this set of questions was that a lot of traditional, alternative medicinal names were suggested which consisted of natural, herbal products. This shows a trend and diversion towards alternative medicinal streams like Ayurveda and Homeopathy¹⁰. It was observed, children had ample knowledge about medicines, showing the importance of drugs in this juvenile age, it is also an indicator of the risk they may be exposed to if and when they decide to exercise their autonomy⁵. This result was different from the study by Aramburuzabala⁴ where kids lacked basic information about medicines and had not developed a mature learning in adolescence when compared to tiny tots.

Most of the kids visit their doctor, hospital or physician with their parents. This throws light and need for proper parent education not only as a health care taker of the family but also as a key conversing figure to educate kids about medicines⁴.

Regarding admission in hospital during sickness, the majority of kids had not faced this situation, almost all kids agreed that they could make a first aid box themselves and maximum youngsters had knowledge of phone numbers of any doctor, physician or hospital in case needed during an emergency.

Sources of medicinal information as stated by kids in descending order were school, books, and home followed by books and newspapers. As far as sources of medicinal information is concerned, maximum students of secondary grade mentioned schools, homes and books, teachers have a great role to play here, as also suggested in one of the articles of UNICEF¹¹.

Children were asked to name one disease, a variety of responses were obtained, their knowledge of basic diseases was satisfactory. Then started the Corona quiz⁶, many studies have been conducted to assess knowledge of Covid 19 infection amongst kids^{6,12}, in that, kids named one medicine for covid 19 infection, Only some of them named few of the drugs correctly, some kids stated few dosage forms, few mentioned herbal decoction showing the home made remedies highly prevalent in households for protection from the ongoing infection⁵.

Children were asked the name of mask, few were specific, rest all general answers were received. All kids knew the country of origin of covid19 infection, all put masks, had knowledge of handwashing, though when asked specifically duration of handwashing, few were incorrect in their opinion of seconds, "Hand washing is so important"¹³, it has been a part of specific studies too^{13,14,15}. Its proper steps and duration should be taught thoroughly at homes and in schools¹⁴. It has a great role in control of infection¹⁵ And should be taught strictly to every child.

All kids keep sanitisers though their choice of sanitiser is different and affected from home background. And to a great surprise, all kids had knowledge of Alternative medicinal streams like Ayurveda and Homeopathy showing the diversion of the treatment strategies from allopathy as followed in their culture, households, religion etc. Similar observations were made in study done in greek children¹⁰ which emphasized on the fact that foundations for perceptions about drug use are created in childhood, shaped by culture, religion and experiences and influenced by household and behaviours during illness, treatment and recovery through medicines. Greek children also had a knowledge of alternatives and supplements to medication like teas, soups, boiled rice etc.¹⁰, all as a part of their cultural therapeutics.

Limitations of the Study.

1. There was no parental interview or feedback recorded
2. Kids might have sought parental aid to complete their online questionnaires, which went unnoticed due to lack of physical monitoring and due to distance in space and time.

CONCLUSION

Children need to know about medicines, what are they, why are they used, what is illness, course of treatment and recovery, all these informations need to be observed by kids as per their understanding, age, culture, household, religion, etc. They are the budding physicians of society, they need to be inquisitive and curious for knowledge of all. But at every level of education, it is well known that "A little knowledge is a dangerous thing", hence there is great need of

developing health education programs according to the kids level at every grade of schooling.^{4,5} Childrens' logic and decisions should be based on knowledge and not pampered by taste, color, price, convenience, etc⁴. Parents¹⁶ should be well educated, informed, should converse a lot with kids about developing and changing health care trends, norms and data and at the same time teachers^{11,17} should converse with kids in a proper, effective measure, they can be true guide and role model for a child to build up correct beliefs, perceptions, attitude regarding drug use, drug compliance, recovery of ailments and control the spread of infection like Covid 19 pandemic as suggested in one of the studies by UNICEF¹¹.

The study can be further extended by incorporating the feedback, role and opinion of parents¹⁶, community pharmacists¹⁷, family doctors and teachers^{11,17} all that affect a kids life deeply and completely.

Article Information

Disclosure: I, Dr Radhika Vijay, the author declare no conflicts or financial interest in any service. Grants, medications, etc mentioned in the manuscript.

Ethical Approval and Informed Consent: I, the author, assert that all procedures contributing to this work comply with ethical standards of relevant guidelines on human subjects and have been approved by the Institutional Ethics Committee, S.P. Medical College, Bikaner, Rajasthan, India. Prior written informed consent was obtained by the childrens' parents or guardians as a mandatory question in the questionnaire.

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2. The study was ethically approved by the Institutional Ethical Committee of S.P. Medical College, Bikaner, Rajasthan 334003

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