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PRACTICE AND PERVASIVENESS OF IMMUNIZATION AND SELF MEDICATION IN RURAL ZONES OF WAYANAD:A PILOT STUDY

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ABSTRACT

Immunization which provides the immune system more efficient to act against foreign particle and invading microorganisms and the self-medication is a serious condition when it is not taking care of the prescribed way. To prevent on-going trend of self-medication practice or to avoid the danger situation to a great extent and to assess the prevalence of immunization concerns. The cross-sectional study was carried out in Wayanad district. The questionnaire was used to acquire the data from the contributors. The questionnaires are based on self-medication and immunization it entails of demographic data and the health seeking behaviour and practice of self-medication and immunization. In this pilot study , population were less . Among male and females are included.in these majority of respondents are females (76.9%).one of the main questions of the study concerns the possibility of self-medication and knowledge about immunization. 61.5% respondents take immunization for their children but they have less knowledge about immunization and 100% of respondents take self-medication. The study also focused on the availability of medicines for self-medication and importance of immunization. From the data it could be concluded that the medicines are commonly available in pharmacy and most of them didn't know about immunization purposes. We concluded that awareness of immunization and effect of self-medication in people of rural area is important.

Key Words: Pervasiveness, Practice, Self-medication, Immunization.

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INTRODUCTION

Self-medication is a human behaviour in which an individual uses a substance or taking drugs on one's own initiative or advice of another person for

cause problems like resistance to drug, damage to organs and other toxicity which leads to increased mortality.^[1] Immunization is a process in which enhance immune response to a pathogenic condition due to lack of awareness. The impact of immunization will be decreased or it may be due to lack of knowledge, fear to needle and other factors. Due to some religious views this may cause decrease in practice of immunization thus this study helps to keep children safe in pandemic conditions hence mortality can be reduced.^[2]Self-medication is the practice of administration of medication as self without any

prescription or without consulting a doctor.^[8] It will be dangerous when the drug overdose occurs will be leading issue in which is more in un-educated than educated. Vaccinations are the most effective interventions used and have resulted in dramatic declines and regional elimination of many serious childhood infectious diseases.^[2] Organizing immunization services to protect the society against preventable diseases is a core function of public health.^[10] In India, the Universal Immunization Programme introduced in 1985, targets 27 million infants and 30 million pregnant women every year and is one of the largest in the world.^[2] Universal Immunization Programme has improved the availability of vaccines and cold chain management compared to earlier immunization programs. This system has not yet achieved a sustained improvement in vaccination in many of the Indian states.^[6] The Government of India launched the Expanded Programme on Immunization (EPI) in 1978 with the objective of reducing the mortality and morbidity resulting from vaccine-preventable diseases in childhood. Immunization is a practice of global health and development.^[3] Vaccines reduce risk of getting a disease by working with body's natural defences to build protection. Immunization currently prevents 2-3 million deaths every year from disease like diphtheria, tetanus, pertussis, influenza and measles. In 2019, estimated 5.2 million children under 5 years died mostly from preventable and treatable causes in children aged 1 to 4 years accounted for the remaining 2.4 million deaths.^[4] Vaccination is a simple, safe and effective way of protecting against harmful disease. Immunization uses body's natural defences to build resistance to specific infections and make immune system stronger. vaccines are taken during birth to childhood to old age. Most of the countries have a vaccination card. If we delay vaccination, we at risk of getting illness. Vaccines can cause mild side effects, such as a low grade fever or pain or redness at injection site. Rural residents constitute a population who are at high risk. Vaccines are most effective and useful tool in health interventions which are used world-wide and have result in elimination of serious childhood infectious diseases.^[2] Self-medication is the use of medication or treatment by an individual

without seeking a prescription. Self medication is the most popular form of self care. The number of OTC medications has increased significantly allowing more individual to practice self medication. The non prescription medications can be purchased at various location such as pharmacy, supermarket and retail super stores etc.^[9] The study was carried out in patient caregivers and in local community of a tertiary hospital in a rural area of wayanad. It is conducted to evaluate the practice and pervasiveness of immunization and self-medication in rural zones of wayanad.

MATERIALS AND METHOD

It is a prospective and descriptive cross-sectional study, sample size will be calculated according to prevalence rate in Kerala. A Pre-formed structured questionnaire is using to study the same. Randomly selection criteria using rural areas of wayanad are preferred.

INCLUSION CRITERIA: Those are willing to participate in the study.

EXCLUSION CRITERIA: Those who are under the age of 12 are excluded from the study.

The cross-sectional study was carried out in Wayanad district. It was conducted to appraise the practice and pervasiveness of immunization and self-medication in rural area. The wayanad district is a rural zone, having a population of 8,62,378, 13 primary health centre, seven government hospital and one private medical institution. The literacy rate of the district was 89.32 the survey was commenced in patient spectators and common community. Our study area is in rural zone in moppainadu panchayath with a population of 24,590 and the literacy rate was 90.77%. The immunization status of children of age upto 15 years was recorded according to standard cluster technique recommended by WHO. The questionnaire was used to acquire the data from the contributors. The questionnaires are based on self-medication and immunization it entails of demographic data and the health seeking behaviour and practice of self-medication and immunization. A pilot study regarding this was accompanied according to the prevalence rate of this concerned zone. Statistical analysis was conducted conferring to the authorized measures for pilot study.

RESULT

A total of the subjects agreed to participate the study. Among these male and females are included. In these majority of respondents are females (76.9%). One of the main questions of the study concerns the possibility of self-medication and knowledge about immunization. 61.5% respondents take immunization for their children but they have less knowledge about immunization and 100% of respondents take self-medication. The study also focused on the availability of medicines for self-medication and importance of immunization. From the data it could be concluded that the medicines are commonly available in pharmacy and most of them didn't know about immunization purposes. Among the participants 61.5% didn't know about the prescribing information and only few people check the expiry date. The study shows that the common source of medicines is from pharmacy shop. In case of immunization 61.5% take immunization but among these 80% don't know about complete information of immunization.

1. GENDER DISTRIBUTION

Among the participants 23.1% men and 76.9% women it shows that more women are interested in this study. The knowledge rate of men is less when compare to female about self-medication and immunization. It is shown in fig-1.

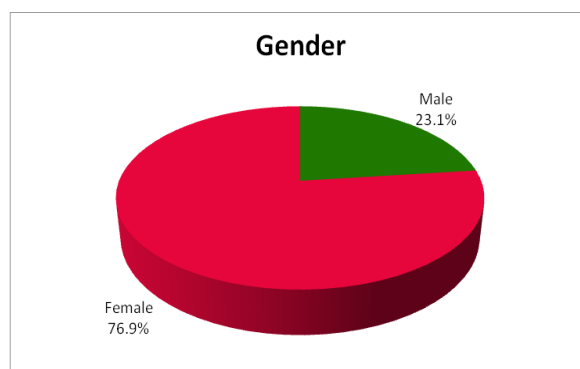


Fig-1 Showing gender distribution

2. LABELLING INFORMATION

While looking to the participants which may check the labelling information is less among the 100% a few only check the labelling information and 61.5% are not regularly check the information (fig-2).

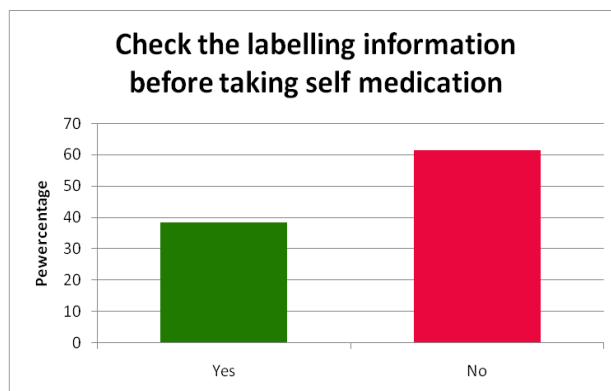


Fig-2 showing percentage of people check labelling information

3.COMMON SOURCES OF INFORMATION

In this study it is find that a wide range of medicines bought from pharmacy shop and only 15.4% of people aware about drug and its importance.A wide range of pharmacies are giving medicines without prescription and the leftward is the drug which is left over after consulting the doctor of primary health centre which the medicines easily available(fig-3).

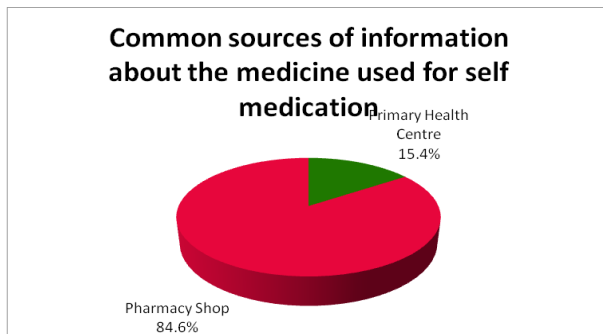


Fig-3 showing common source of medication

4. EXPIRY DATE

Majority of the population have awareness towards expiry date and medicine. Expiry date is the most important one. Expiry date shows the duration of product in stable state .so 38.5% not aware means it may leads to decreased concern towards the medicine.(fig-4) The 61.50% check the expiry date of a drug before administer but there is also a 38% who didn't care about the expiry.

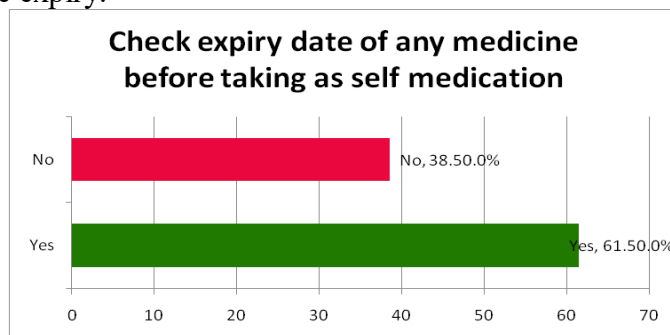


Fig-4 showing percentage of population check expiry

5.ADVERSE EFFECT OF MEDICINE

The drug we administer has its own side effects the study shows that no one focus on the side effect of a medicine in which 23.10% are focus on the adverse effects and the remaining 76.90% of the population don't notice about the adverse effects of medicine(fig-5).

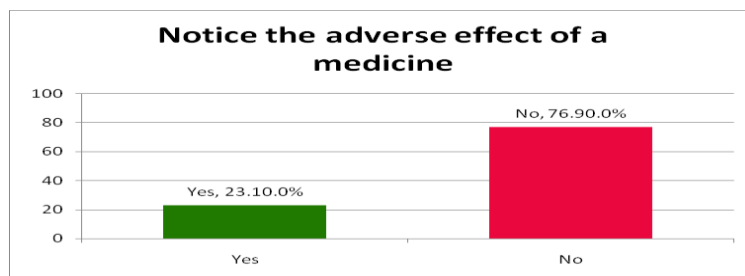


Fig-5showing adverse effect of medicine

6. SELF MEDICATION: ADVICE

The chart shows that the condition in which most of the persons advice or give medicines to their family without proper direction.(fig-6) Only 30.8% of the respondents answered that they are not ready to give self-medication advice others for some other reasons 69.2% of the population willing to give medicine to others.

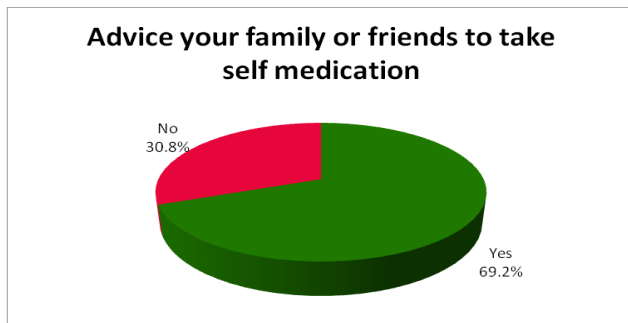


Fig-6 showing percentage of advising family to take self medication

7. MEDICATION: ADR

Only a few participants are affected by the self-medication but the affected persons conditions are life threatening some leads to death. It shows the dangerous condition of self-medication.(fig-7)In this study population 15.4% are affected by the adverse events of self-medication which lead to paralysis and death and 84.6% does not have any adverse effects

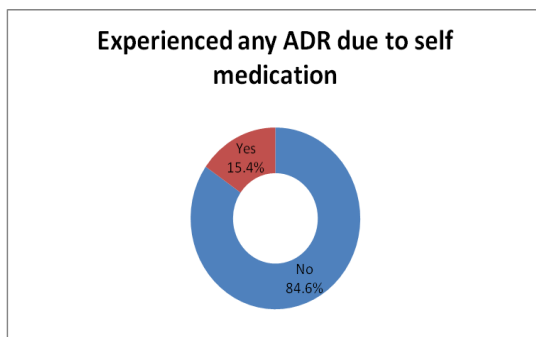


Fig-7 showing medication related ADR

8.DISEASE ASSOCIATION

Disease particularly treated by their concerned doctors and health care members. It is showed in fig-8. Due to the unavoidable factors people are selectively practicing self-medication because of their ignorance and other factors. Most of patient suffer from acute infection which they take self-medication

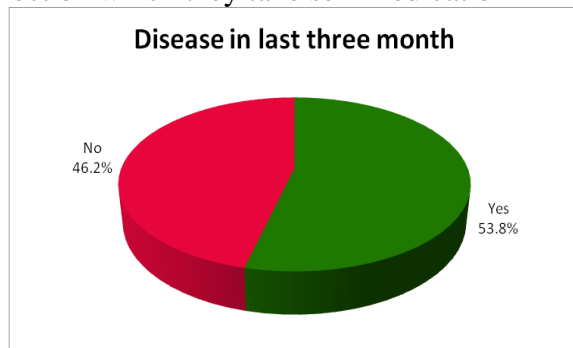


Fig-8 showing disease in population

9. LAST THREE MONTHS ASSESSMENT

53.80% of population taken self medication for last three months (Fig-9).

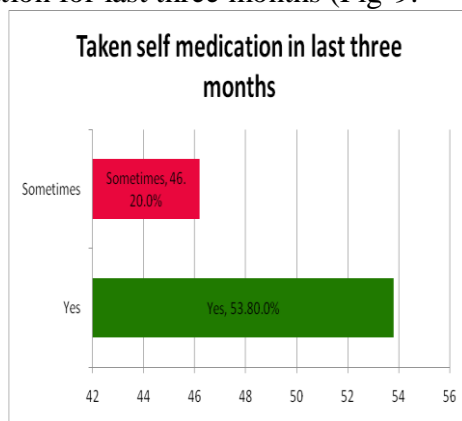


Fig-9 showing percentage of population taking self-medication in last three months

10. SELF MEDICATION AND DISEASE

For acute disease cases more often people are taken self-medication (Table-1).

Table-1 showing self-medication and disease

Disease for self medication	Frequency	Percent
Acute disease	13	100%

11. REASON FOR TAKING SELF MEDICATION

Most of the people have taken the self-medication practices due to their bad experience at hospital. Several barriers are there in our community due to these factors like financial issues, lack of time, old prescription using practice etc are mostly used for the purpose of self-medicine (Fig-10).

Reason for taking self-medication	Frequency	Percentage
Financial issues	2	15.4
Bad experience at hospital	8	61.5
Lack of time	2	15.4
Have old prescription	1	7.7
Total	13	100

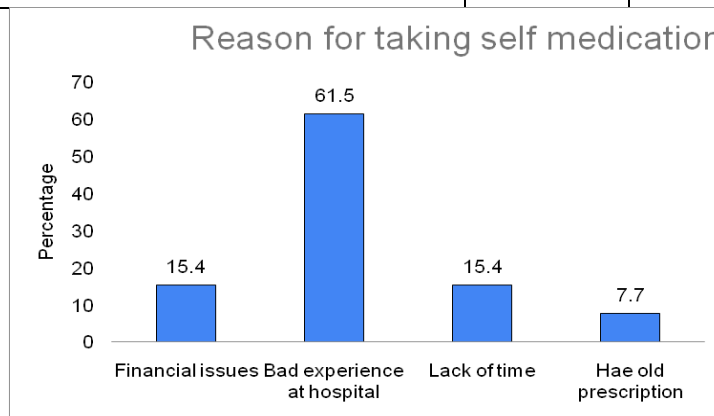


Fig-10 showing reason for self-medication

12. IMMUNIZATION AWARENESS

38.5% of population are not aware about immunization practice. Compared to males, females have more awareness (Fig-11).

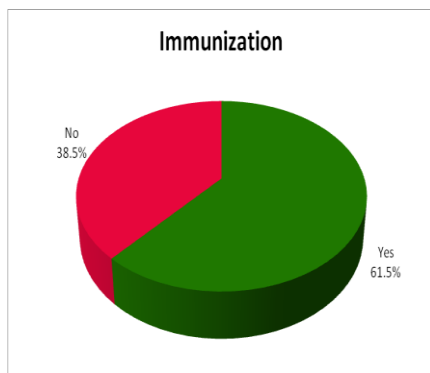


Fig-11 showing awareness about immunization

13. ADR AND IMMUNIZATION

Only small of the population reported as they suffer ADR from immunization practices. While considering the adverse reaction due to immunization .7% suffer from immunization which is not much life threatening but cause disability (Fig-12).

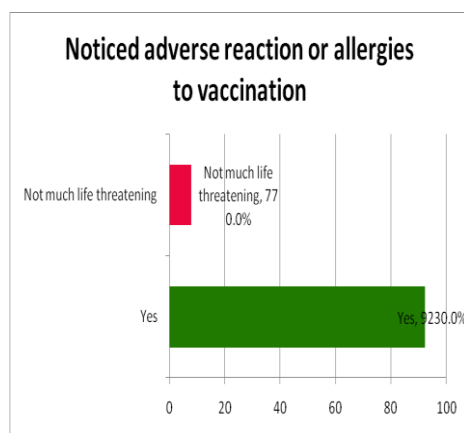


Fig-12 showing relation of ADR and immunization

14. IMMUNIZATION SCHEDULE AND ITS AWARENESS

Only 23.10% of population have awareness about immunization schedule others do not have awareness about immunization schedule (Fig-13).

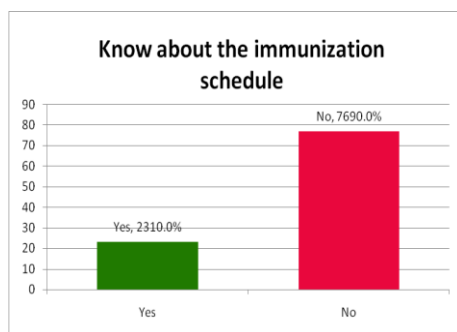


Fig-13 showing the percentage knowledge about immunization schedule

15. INFORMATION ABOUT IMMUNIZATION

30.80% of population we have taken as fully immunized. 69.20% of population awared about immunization only because of the awareness of health care professionals (Fig-14).

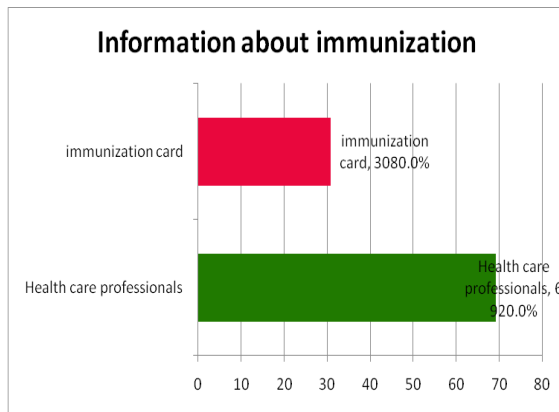


Fig-14 showing information source about immunization

16 .BOOSTER DOSE

53.8% of population prefer that they do not give the booster dose, it is evident that, they are unaware about the booster dose and its importance (Fig-15).

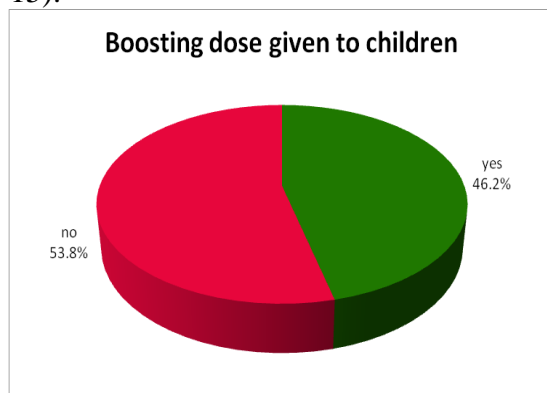


Fig-15 showing boosting dose percentage

17.WILLINGNESS AND IMMUNIZATION

Most of the individuals which are of 76.90 are willing to take immunization and the 15.40% are taking only during their is a strict rules. The remaining 7.70% are not willing due to personal belief and less knowledge about immunization (Fig-16).

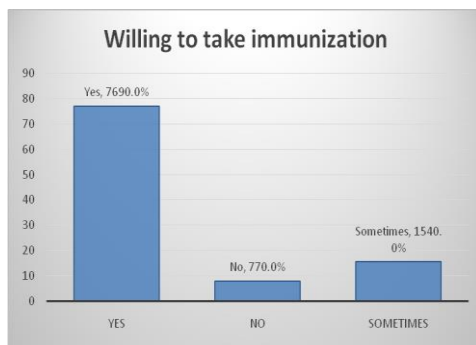


Fig-16 showing willing of population to take immunization

18. SCHEDULE AND ITS FOLLOW UP

All the participants are trying to complete the vaccination schedule and few of the people are stopped in between the schedule . among the total population 84.6% are fully vaccinated and 15.4% are not (Fig-17).

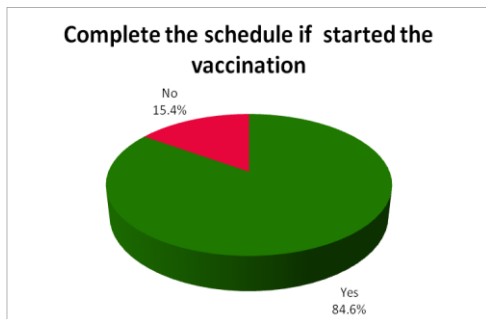


Fig-17 showing percentage of population taken vaccination

19. PREFERENCE OF CORRELATIONS

We asked the preferences of the concerns that medicine and immunization. Only 23.1% of population selected immunization and 69.2% population selected medicine as there preference (fig-18).

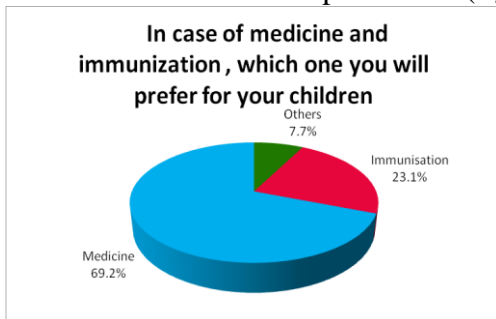


Fig-18 showing preference of correlations

20. COMPLETENESS OF IMMUNIZATION TILL 6 YEARS

Majority taken vaccination that is for 6 years (Fig-19).

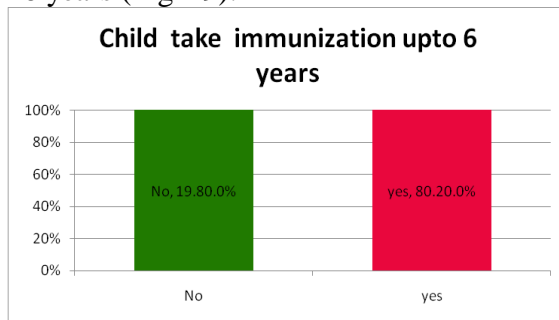


Fig-19 showing percentage of children taken immunization upto 6 years

21. SATISFACTION RATE OF IMMUNIZATION

The population are not satisfied due to lack of awareness about immunization (Fig-20).

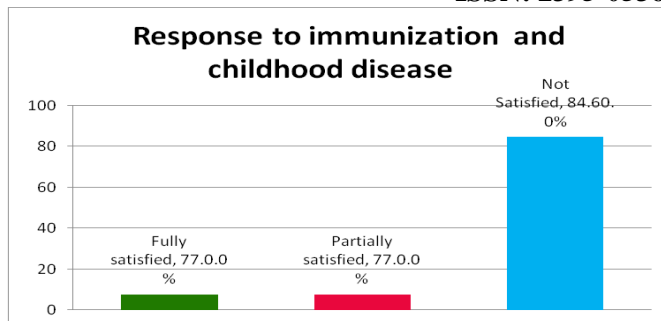


Fig-20 satisfaction rate of immunization

22. IMMUNIZATION AND ITS PURPOSE



Fig-21 showing notice the purpose of immunization

The results shows that not everyone even know about what is taking or the benefit of immunization only a 46% ask or notice the purpose of immunization (Fig-21).

23. COLD CHAIN MAINTENANCE

Population are not fully aware about cold chain. Cold chain is the temperature which store vaccine and the improper storage cause deterioration of vaccine leads to serious adverse events (Fig-22).

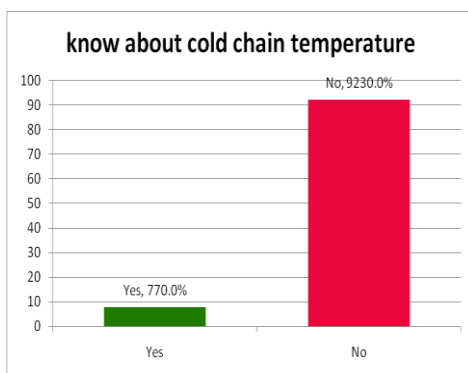


Fig-22 showing Cold chain maintenance

24. CONCERN ABOUT IMMUNIZATION

Some population are not willing to take medication due to the past incident on family and a group of population include 15.40 % didn't take immunization due to various belief (Fig-23).

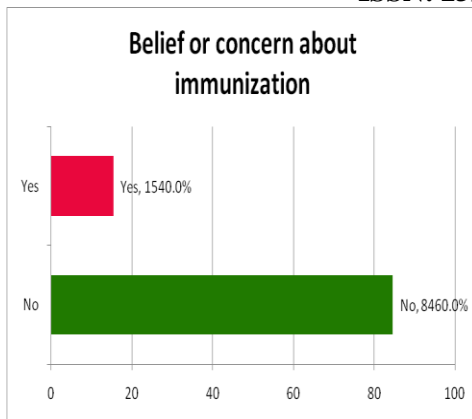


Fig-23 showing the population concern about self medication

25. IMMUNIZATION CENTRE AND RELEVANCE

Immunization centre was preferred by population due to the awareness by health professionals and the proper handling of immunization. The 84% participants takes immunization for their children from health centre and the no of persons from hospital is less (Fig-24).

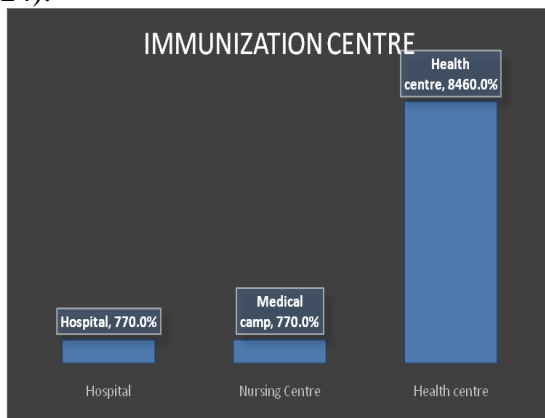


Fig-24 showing immunization centre and relevance

DISSCUSSION

Based on the study the practice of self-medication is more among rural areas and the source of medicine is found to be pharmacy shops and the immunization is taken as related to the government schedule and among the participants don't know about immunization too. The practice and pervasiveness study of self-medication and immunization in rural area has a wide range of acceptance and the study shows the existing condition of harmful effect towards self-medication and the false belief and concern on immunization. Proper communication and counselling can prevent the harmful situation happening, so want to continue the same work in larger population.

CONCLUSION

We concluded that awareness of immunization and effect of self-medication in people of rural area is very important. Most of the population taking vaccination to their children without knowing the purpose or in case of self-medication not everyone know about the risk factors and harmful effects, There should be a false belief and concern about

immunization and less knowledge about self-medication cause harmful effects to the community in future. If we continue with the same study in larger population it may increase the adherence and positive believes towards the same. So considering for the better results and vision towards the larger population study.

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