## Research Experience (including, summer research, hands-on research workshop, etc.)

As research expert, regularly conducting research and ethics related workshop for undergraduate and post graduate medical students. Also invited by other institutions and university for delivering talk on research proposal writing, ethics in research, pulication ethics, publication guidance, plagiarism, citation tool manager software training and many other topics.

Worked as research consultant with DDMM Heart institute, Nadiad for fours years in past for developing their research and clinical trials.

More or few details are on my blog - https://drnirajpandit.blogspot.com/

Sharing my 10 best research paper summary for your understanding

10 best papers of Dr. Niraj Pandit with brief summary

1. Knowledge and perceptions about COVID-19 among the medical and allied health science students in India: An online cross-sectional survey- available on link https://www.sciencedirect.com/science/article/pii/S2213398420301780

An infection (COVID-19) without any specific cure makes the people more vulnerable to get affected due to insufficient knowledge and unhealthy practices. In this scenario, healthcare students can act as reliable information providers. This study aimed to assess the knowledge and perception about COVID-19 among medical and allied health science students.

Methods

A web-based cross sectional survey was conducted during February and March 2020. A 24-item survey was developed and randomly distributed among the study population. Descriptive statistics was applied to represent participant characteristics and Chi-square test was used to evaluate the level of association among variables with a significance level of $p < 0.01$.

Results

Total, 97.95% (715/730) participants completed the survey. High proportion of students were from pharmacy (45.73%) followed by medical (22.52%), physiotherapy, nursing and dental background. Majority of participants were having adequate knowledge while about 18% had partial knowledge about the symptoms of severe COVID-19 cases. Students have shown a positive perception of COVID-19 prevention and control while few invalid responses related to the use of herbal medicines or garlic were noted. About 50% had rightly stated that, the antibiotics and vaccine are not effective in COVID-19 infection at present.

Conclusion

As the COVID-19 cases are rapidly increasing **w**orldwide, it is essential to improve the knowledge and beliefs among general public to prevent its spread. Health care students with their education background and basic understanding about COVID-19 can play a significant role by making community people aware about the seriousness of this pandemic situation.

2. Adverse event following immunization and relation with blood group following COVID19 Vaccination among Indian community: A cross-sectional study – available on link - https://journals.lww.com/jihs/_layouts/15/oaks.journals/downloadpdf.aspx?an=01896156-202109020-00004

   Introduction: In middle of the 3rd wave, COVID19 is now gradually making agent host environment balance at the world level. COVID19 vaccine is also available for the prevention of diseases. The two vaccines which are available in India till July 2021, they are COVISHIELD and Covaxin. There are various news heard about the relation of the ABO blood group and COVID19 disease. However, no study has tried to the relation of various blood groups and adverse events following immunization (AEFI). Methods: This was a community-based cross-sectional study. It was conducted online mode with the use of Google Forms. Study participants were Indian citizens and who took either Covishield or Covaxin as COVID19 vaccination. The pretested form was used, which consisted of various information regarding blood group of individual, vaccine, type of vaccine, doses of vaccine, side effects postvaccination, what is/are side effects and other information like do you have disease COVID19. Results: A total of 893 participated in the study, but out of them, 731 participants took vaccine either one or two doses. Most of the participants, 597 (87%), were from urban areas. The postCOVID19 vaccine AEFI prevalence was 69.7%. The association between ABO and Rh blood group and AEFI was not statistically significant. However, Covaxin has lesser side effects compared to COVISHIELD. Even a small group of COVID19 disease also had no association with ABO or Rh blood group. Conclusion: The side effects following the COVID19 vaccine are quite common. Majority were mild AEFI. There is no statistical association with blood group and postCOVID19 AEFI.

3. Best Weapon to Fight COVID-19-Like Pandemic–Its Host Factors of Epidemiological Triad – available on link - https://journals.lww.com/jihs/fulltext/2020/08010/best_weapon_to_fight_covid_19_like_pandemic___its.15.aspx
   This letter to the editor emphasizes the importance of strengthening the human host, a critical component of the epidemiological triad, to combat pandemics like COVID-19. While efforts focus on controlling the virus (agent) and environment through social distancing, hygiene, and lockdowns, the letter argues that host factors—physical, mental, social, and spiritual health—are often overlooked. It advocates for improving immunity through healthy habits, balanced mental well-being, social connections, and spirituality, emphasizing that investing in host health is cost-effective and essential for future pandemic resilience.

4. How safe is COVID-19 vaccination among pregnant women and its outcome–A hospital-based retrospective study in Indian population – available on link - https://journals.lww.com/jfmpc/fulltext/2023/12090/how_safe_is_covid_19_vaccination_among_pregnant.63.aspx?context=latestarticles

   Although getting the Covid infection is equal for every person, during pregnancy, the women's immunity is a little lower than usual, so they are more prone to infection. That is why they should be taken care of with more precautions. A vaccine is the best weapon to fight such infection. Covishield and Covaxin are the two vaccines first introduce in country India including for pregnant women. The safety of the vaccine was a big concern as one of them is a newer type of vaccine. The current study was planned with objectives to understand the safety aspect of Covid19 vaccine on pregnancy outcome and Adverse events following immunization (AEFI) following vaccination.

**Materials and Methods:**
This was a hospital-based retrospective cohort study. The sample size was all the pregnant women who delivered a baby from July 2021 to April 2022 at the tertiary care hospital in Vadodara. These women were retrospectively assessed for the status of vaccination based on the record and other information related to ANC from the record. Total of 1974 women were eligible for study after inclusion–exclusion criteria. The collected data was analysed.
**Result:**
Of the 1974 pregnant women, 531 (27%) took any of one covid19 vaccine and 1443 (73%) did not take vaccine. There were 511 (96%) women opted for Covishield vaccine and 20 (4%) women who opted for Covaxin. Of 531 women who took vaccination, 46% women had AEFI. The risk of low birth weight (LBW) baby was 40% among vaccinated v/s 39% among non-vaccinated and congenital malformation was 0.6% among vaccinated v/s 1% among non-vaccinated women. On the contrary, the risk of premature birth was 8% among the vaccinated group v/s 13% among the non-vaccinated group and NICU admission following delivery was 8% among the vaccinated group v/s 12% among the non-vaccinated group.
**Conclusion:**
AEFI among pregnant women were found less compared to the general population. The study also revealed that both Covishield and Covaxin are found safe for pregnancy outcomes and can be given to pregnant women during any trimester of pregnancy message for a family physician.

5. Concept of family physician is required to relaunch in post Covid19 era for Urban India – available on - https://journals.lww.com/jfmpc/fulltext/2021/10100/concept_of_family_physician_is_required_to.70.aspx
   he article highlights the decline of the family doctor model in India, particularly in urban areas, where direct access to specialists has overburdened healthcare systems during the COVID-19 pandemic. It argues that reintroducing general practitioners assigned to families could relieve pressure on hospitals and improve care. The suggested model, similar to rural primary healthcare, would allocate doctors to manage 1,000 families each, ensuring better care coordination and referrals. Implementing this system could prevent future healthcare breakdowns in urban areas.

6. Self-Care Practices and Influencing Factors Among Type 2 Diabetes Mellitus Patients: A Hospital-based Cross-Sectional Study – https://www.ceghonline.com/article/S2213-3984(24)00319-1/fulltext
   This cross-sectional study assessed self-care practices among 93 patients with Type 2 Diabetes Mellitus (T2DM) in Gujarat, India, using the Summary of Diabetes Self-Care Activities (SDSCA) scale. While medication adherence was high (mean score = 6.66), other practices lagged—only 11.8% reported good dietary habits, and 50.5% practiced regular foot care. Blood glucose testing adherence was particularly low (mean = 0.38). The study highlights the need for tailored interventions to improve self-management, especially among older adults.

7. A Study of Effect of Knowledge, Attitude, And Practice on The Diabetic Patient with Counselling as Intervention–A Non-Randomized Community-Based Trial from Gujarat - http://njcmindia.com/index.php/file/article/view/2543

**Introduction:** Lifestyle modification is key to management of diabetes. Behavioural change is key to adopt lifestyle modification. The current study was planned with objective to assess the impact of counselling on knowledge, attitude, and practices among patients with diabetes mellitus in rural and urban areas of Gujarat.
**Method:** It was a non-randomized interventional study conducted in the state of Gujarat, India. Known cases of diabetes were enrolled for the study. Two equal size groups of study participants from urban and rural area were divided equally for intervention group (N=77; 28 urban +49 Rural) and control group (N=77; 28 urban +49 Rural). Regular counselling on role of diet in DM management, self-care, deaddiction, role of physical activity, and drug compliance was given by community physician for three months to 6 months. Pre and post intervention KAP score was collected and evaluated.
**Result**: The knowledge, attitude and practice score were increased among counselling group in comparison to traditional treatment group in both urban and rural area. The score increased from 5.4 to 10.4 in knowledge; 3.07 to 5.07 in attitude and 5.07 to 8.92 in practice among urban participants. Similarly, the score increased from 4.14 to 7.16 in knowledge, 2.57 to 3.67 in attitude and 4.73 to 7.42 in practice among rural participants.
**Conclusion:** With counselling the knowledge, practice and attitude of chronic patients are improving. The study recommended that counselling services should be available to all diabetes patients. It should be available to patients at their doorstep if possible as study depict.

8. Prevalence of reproductive tract infection among tribal migrant women living in urban areas: a community-based cross-sectional study – available on - https://www.sciencedirect.com/science/article/abs/pii/S0033350624003597

The current study investigates the reproductive tract infections (RTIs) among tribal migrant women in urban areas of Gujarat, India. These groups of women face multiple challenges, including limited healthcare access, poor living conditions, and inadequate reproductive and child healthcare services. Therefore, the present study was conducted to assess the RTIs of tribal women living in urban areas.
Study design
It was a community-based cross-sectional study.
Methods
It was conducted among the four municipal corporation areas in Gujarat. A sample of 592 women, who were in reproductive age (15–45 years) and belonging to tribal community and seasonally migrated to urban areas, were included for the study.
Result
Almost 64% of the participants married before the legal age of 18, with 29% marrying before the age of 15. Furthermore, early pregnancy (at <18 years) was reported by 29% of the women. Approximately 22% of the women experienced reproductive health issues, with a prevalence of 13% for symptomatic RTIs, 8% for urinary tract infections (UTIs), and 8% for menstrual problems. Almost 58.4% of women with RTIs, 54.1% with UTIs, 48.9% with menstrual problems, and 46.1% with polycystic ovary syndrome were classified as underweight. However, this relationship was not statistically significant.
Conclusion
The study revealed the 13% of the prevalence of RTIs among the migratory tribal women. It is matching with national-level community-based study of India National Family Health Survey. The current study explored that there is no association of nutrition and RTI. Also, it is required to plan a larger-level community-based study to understand overall reproductive health issues among all different group of women.

9. Child Birth Practices and Utilization of Antenatal Care (ANC) Services Among Migrant Tribal Women in Urban Areas of Gujarat – available on - https://pmc.ncbi.nlm.nih.gov/articles/PMC10285261/

   Introduction: Tribal women constitute a vulnerable population and migratory tribal women living in urban areas are among the most vulnerable and neglected sections. The current study was conducted among migratory tribal women living in the urban areas of Gujarat to understand their antenatal care (ANC) and child birth practices. Methodology: This was a community-based mixed methods study, conducted during 2022, in four major cities of Gujarat. The sample size for the quantitative study consisted of 592 participants. Inclusion criteria for participants were tribal women migrants to urban areas; migration for employment; less than a year of residence in the urban area; married women; and working on construction-sites. The qualitative study included 20 tribal women selected from cities and a total of 24 grassroots workers and in-depth interviews were conducted. Results: The participating women were in the age group of 16-43 years, with mean age being 26 years. Almost 67 (11%) women were pregnant at the time of the study. Around 51% of the women had FOUR antenatal care (ANC) visits during their previous pregnancy. Around 63 (18%) women had home births. Qualitative data revealed that their deep-rooted cultural practices and beliefs influenced their ANC patterns, child birth practices, and utilization of hospital services. Conclusion: Migrant tribal women are considered a vulnerable population in urban areas, as they do not have local documents. Further, they are bound by deep-rooted cultural beliefs. There is a need to use technology for developing tracking systems, in order to provide better maternity care to these women.

10. A study of maternal and child health issues among migratory construction workers – available on link - https://www.healthlinejournal.org/index_pdf/39.pdf
    According to recent census 2011, the total population of India is 1.21 billion. In 2001, 309 million persons were migrants based on place of last residence, which constitute about 30% of the population. The female and children are considered associated migrant in India. They are more vulnerable to health and social issues. The present study was conducted to assess the various aspects of Maternl and child healrh (MCH) issues among migratory families. Study method - It was a cross sectional study and conducted in the Sumandeep Vidypeeth Campus, Piparia, district Vadodara . There were 52 families working in campus and all were interviewed for study. Results- Almost 73% of women were illiterate with mean age of menarche 13 years and mean age for marriage 17 years and mean age for first birth 19years. All were from tribal community. Only one child was fully immunized out of 11 children between 12-23 months. Two maternal deaths and death of two children of less than five years were reported among 52 families in last two years. Conclusion - The study reflects that the group is more vulnerable and there is need to focus on this group to achieve goals of MCH.

There are many other articles which are available on my Google Scholar account. The link is https://scholar.google.com/citations?view_op=list_works&hl=en&hl=en&user=m9R0MWIAAAAJ&pagesize=80

My key work on the Reproductive and Child health, Diabetic mellitus, Malaria, Covid19, Biomedical waste and education with research. My proposed work is also on RCH care among migratory tribal population.