1 INTRODUCTION:

1.1 PREAMBLE

Sickle cell delicacy is inherited issue in light of a point change in position sixth within β chain of hemoglobin, whereby glutamic destructive which is a polar amino destructive (in nature) is supplanted by valine which is a non-polar amino destructive (in nature). The substitution of this valine (non-polar amino destructive) prompts reduces enjoying of hemoglobin for oxygen. \(^1\) At low oxygen strain, sickle cell hemoglobin polymerizes within red platelets into a gel and further into strands inciting a great reduction in red platelet deformability. This polymerization & precipitation of sickle cell hemoglobin within red blood corpuscles reasons changes perfectly healthy of corpuscles from their commonplace globular structure into banana shape resembling a sickle shape. Sickling instrument of red blood corpuscles is reason of smart hemolysis of red platelets conveying on distinctive snares to sickle cell paleness patients.\(^2\) This sickling arrangement of red blood corpuscle is basic role behind all muddlings of patients so treatment must be focusing on deflecting or dealing with life compass of red blood corpuscle in patients are worth more.

The initial clinical observation like cough, fever, palpitation, abdominal pain, dizziness, giddiness, fatigue, weakness, headache, joint pain are clinical features which can be devastating if remain undiagnosed or untreated. These untreated and undiagnosed acute clinical features can progress into complications like jaundice, leg ulcers, priapism, stroke, acute chest syndrome, biliary tract dysfunction, proliferative and non-proliferative retinopathy, spleenomegaly, cerebral infarct and cardiac infarct which can be difficult to manage and become life threatening.

Sickle cell frailty is autosomal passive hemoglobin issue with phenotype variety. In this hemoglobin issue some sickle cell patients have continuous vaso-impediment and difficulties while others have minimal influenced by sickle cell and have ordinary life. Along these lines it is by all accounts a noteworthy
worldwide wellbeing issue that introduces significant difficulties to our social insurance frameworks. There is undoubtedly about that, there is greatly requirement for more government funded instruction, directing and mindfulness on sickle cell frailty in India particularly tribal parts of nation. In examination with other endless infections and hemoglobinopathies, sickle cell weakness stays one of slightest comprehended and befuddling restorative conditions by medicinal services specialists and overall public. The principle objective of current study is to bolster legislature from remotely to control hemoglobin issue sickle cell sickliness. The rationale of poll based study was to produce a pilot scale database on how much understudies fitting in with common range are mindful or uninformed. From this study government will get a thought regarding current status of understudies' mindfulness and what in future should be possible and how to get ready for legitimate making mindfulness when all is said in done populace. This proceeds with exertion in sickle cell look into on youth will likewise get another course for control. The survey was in view of fundamental general data appraisal from understudies so no mental anxiety included.

Just about 250 million people for occurrence 4.5% of world masses is transporters and practically 3, 00,000 infants are considered with a foremost hemoglobinopathies reliably. The high repeat of sickle cell quality in particular areas prompts a high origination rate of homozygotes. In this way sickle cell iron insufficiency speak to around seventy rates of general hemoglobin issue. Almost 60 million transporters of sickle cell and 1, 20000 sickle cell homozygotes are incorporated reliably in world. Every 1 in 50 is carrier for sickle cell sickliness. There was 1, 86,096 sickle cell whiteness cases indicate in Indian subcontinent according to one estimate. Considering 1981 count figures of people in India, it was assessed that there were 24, 34,170 sickle cell quality and 1, 21,375 sickle cell disease patients among tribes in India. Based on transcendence rates of sickle cell hemoglobin, it was evaluated that there were more than 50, 00,000 persons bearers/sickle cell trademark and two lakhs homozygous/sickle cell illness cases among tribal's isolated from others in India. In any case, if we look at 2011 count 1, 78, 62,455 are conveyor/sickle cell quality and 13, 39,684 sickle cell homozygotes/sickle cell disorder amongst
tribes in India. The persons plague with sickle cell are generally tender to appropriately undernourished, weak to illnesses especially to powerful diseases, which incite high dismalness and mortality. The onset of age at menarche is put off for one to three years in homozygous sickle cell tormented young women, dependent upon wholesome status, parasitic infestations, and other assail conditions. The illustration of death in persons who have sickle cell fragility is bimodal, with first top incident in youth and second occurrence in people in their late 30s. Passings in midst of youth are related to compelling reasons, while those in midst of adulthood are a result of organ disillusionment from reiterated tissue destruction.

The sickle-cell quality has get opportunity to be normal in Africa in light of fact that sickle-cell trademark exhibits some impenetrability to parasites falciparum wilderness fever in midst of a segregating time of right on time youth, favoring survival of host and resulting transmission of peculiar hemoglobin quality. Despite way that a singular uncommon quality may secure against intestinal infection, legacy of two interesting qualities prompts sickle-cell iron insufficiency and gives no such confirmation, and wilderness fever is a foremost explanation behind debilitated wellbeing and end in children with sickle-cell whiteness. Expanding affirmation wilderness fever effects come about and in addition changes indications of sickle-cell iron inadequacy in Africa. As should be obvious, ranges where intestinal sickness is available and sickle cell allele is available are covering. It is obscure why individuals with sickle cell quality are impervious to jungle fever yet there are a few hypotheses:

The transporters of sickle cell have some unusual hemoglobin and when they interact with jungle fever parasite they get to be sickle. At that point those sickle cells experience spleen which disposes of sickle cells due to their sickle shape so intestinal sickness parasites additionally would be dispensed with too. The sickle cell quality causes jungle fever to stay in body for a developed time of time so it has capacity develop a guard to it. As amassing of oxygen is low in spleen and tainted cells regularly get caught in spleen so it may be conceivable that they are demolished in spleen. The intestinal sickness parasite delivers a corrosive when it is within red platelets. This corrosive creation causes red
platelets to polymerize and state of cells will get to be sickle. These sickle cells are then crushed when platelets experience spleen.

It is fascinating to note that sickle cell patients in India don't demonstrate extreme clinical signs not at all like and can survive. The purpose behind above may be communication of α-Thalassemia with sickle cell illness, high fetal hemoglobin level and upkeep of life at low level of hemoglobin, and so forth is dependable. On other hand, some sickle cell quality cases those are generally simply like typical, yet indicate extreme clinical appearances and are subject to blood transfusion. This demonstrates heterogeneity of sickle cell ailment in India. By and large normal life compass of sickle cell sickness patient speaks truth 20 years as against ordinary life compass of 50 years of sickle cell characteristic. It is shocking that newborn child/neonatal death rate is right around three times higher in sickle cell bearer folks (80.3) than in typical (26.7) folks per 1000 live births. The neonatal mortality per mother is four times higher in sickle cell transporter couples than in ordinary couples.

These discoveries are inconvenient to descendants of sickle cell attribute couples and are significantly adding to high neonatal or baby death rate in India. It was first run through, studies have uncovered that innate reasons, aside from non hereditary variables, are additionally in charge of high neonatal/newborn child mortality in India. Infant death rate of Indian (national) normal of 60 in year 2003. High level of conjugal association, standing/class and topographical endogamy, absence of restorative offices, psycho-social biases, certain nonsensical conventions and convictions irritating wholesome status and wellbeing, substantial expense of treatment, poor economy, backwardness in all circles of life are a percentage of remarkable components of these helpless individuals in India. In any case, a joint endeavor of antenatal consideration and inductive screening is by all accounts most productive methodology for hemoglobinopathies in India. A coordinated national preventive and administration wellbeing strategy for hemoglobinopathies in India are more than once over emphasized. Unless region based and need particular social insurance methodology is advanced which would be suitable, sufficient, simple
to get to, and sensible, objective of wellbeing for all will remain optimistic dream in India.

The study involved basic questions like awareness on blood group, awareness on sickle cell anemia, its prevalence rate, contingency, average life span of patients, preventive measures, and awareness on autosomal nature of disease and current government facilities provided to hemoglobin disorder sickle cell anemia. Therefore awareness on hemoglobin disorder sickle cell anemia by communicating via person to person and student to student would be created and it helps in spreading awareness in community also. Students of higher secondary schools are at prime age for understanding basic information about disease and also importance of genetic and premarital counseling session. For any stress free survey, most important perspective is ethical perspective, so to be clear in that, students are asked to sign on informed consent so that to clarify that there is no mental stress or compulsion is being made to carry out survey. One awareness lecture conducted on sickle cell anemia for complete detail and basic information and understanding about disease. In addition, a poster and leaflet is also given to all schools for continues awareness in students. All questionnaire data entered into graph pad database and coded by using a numerical system. The questionnaire contained categories of race identification for participants to identify: 1) open 2) other backward class and 3) schedule tribe and schedule backward class. Gender was coded as 1) male and 2) female. Age was mentioned by students in filling blank. Frequency tables, cross tabulation and chi-square tests used to evaluate variation in currently existing sickle cell anemia knowledge among students and statistically significant p value (p=0.05) used to determine variation in response rates. The chi square test used to group students response rates by gender.

It is always said that work done for doctorate degree should be always focused towards how beneficial it will be for population. So, this initiative is mainly design to be helpful to society by creating awareness. Awareness can always be very handy tool to control any problems. Other countries are already emphasizing on screening and education on sickle cell anemia, than our country can also do such initiatives. The simple reason for justification of topic of
research is working on disease on which even our government also focusing and performing various activities to control it. Awareness program can draw attention of population where disease is prevalent. Thorough awareness program can guide to patient and guardians to manage sickle cell complication in emergencies. If by spreading awareness thorough proper step by step plan and implementation, day will come when other countries will be following same to support their healthcare system to fight against hemoglobin disorder sickle cell anemia.

By assessing awareness positive message can be convey to all schools and people that healthcare system by community pharmacist are still working with selfless motives. Secondary on regular assessment of such things students also encouraged to participate in such activities. By assessing awareness a proper idea about perception of students living in prevailing areas can also be obtained. The point which justifies this research is a community pharmacist with active participation can bring a massive change in awareness on health. In recent times even our prime minister of India emphasizing on awareness and use of social media to enhance public awareness, current study also being a part of such activity in developing India. The involvement of such important topics in study will become a boon for all tribal students because, it's important for them as very few of them only go for higher education.

In recent times we know that it is not so difficult to encourage people to accept a new practice because psychological perception of population is changing. Various systematic efforts through social, political, technological or psychological way can be implemented to bring such new practice. One such good example through political point of view is Swachta Abhiyaan. Every person has perception which guides action. Many villages and population and community do not have a link between health and current sanitary practices and therefore there is no reason to modify such practices. It is unbeatable truth that sickle cell anemia is a social liability now especially in tribal areas. To control spreading of such disease and prevention is not only responsibility of government and doctors and research scientist but it is responsibility of each and every member of pharmacy field and also every members of society. Because
generally in rural as well as in urban area majority were in opinion that it is responsibility of health personal only. As large number of education of sexually transmitted disease were being implemented in schools worldwide same way education on sickle cell and hemoglobinopathies can be implemented.

The destinations, legitimate structure, length and substance, fitting usage methodology & different qualities may be on pilot scale yet need to plan for legitimate sickle cell and other hemoglobin issue. For sickle cell patients’ special laws, policies, institutions, social arrangements can influence ability of sickle cell control program. Starting late, more thought ought to be paid on options of changing social course of action for sickle cell iron inadequacy neutralizing activity. The decisions may call social systems, social interventions and normal mediations. The tries apply to make social conditions and care in people which support wellbeing headway & danger diminishment can wind up being fruitful in better places. If awareness program run simultaneously with government screening program, in all colleges and school than real impact about surveillance and health education on sickle cell anemia will be possible. Aware 3 group is designed by research scholar and providing platform to perform essential role as community pharmacist. The mission is spread awareness chain and achieve healthy India by 2020. The vision is very clear healthy India can make wealthy India. As we know day by day quality of life by population is decreases and prevalence of number of new disease are increasing. Sickle cell shortcoming is a blood/hemoglobin issue. Sickle cell is most for most part winning in tribal domains/parts of India. Various states of India like Gujarat, Maharastra, Orissa, Tamil nadu, Madhya Pradesh where prevalence rate of sickle cell whiteness is between 5-34%. There is no standard of sustain sickle cell shortcoming is open, so there is a discriminating need of monetarily sagacious organization for upgrading individual fulfillment of patients. Open care and wellbeing preparing can expect a key part in controlling this hemoglobin issue and it can animate masses towards such activities like setting up newborn child screening and premarital screening and genotype ID for sickle cell shortcoming. In current circumstance highlight centrality of care if made in fitting channelized path all things considered people, it may update adherence in wellbeing upkeep rules &
assemble general major data & care among people who are affected besides those not impacted so they can be adequately perceptive to give organization in crisis condition and general improving social protection access and use with support of pharmaceutical human administrations supplier. The concept is very simple if superstar Amitabh Bachchan can be a role model in Polio elimination program then super-star Mr. Salman Khan might be proper choice for such a noble cause in creating awareness because fact is message from personality does impact in mind of people faster.

In India, Gujarat government was first to take activity in controlling sickle cell frailty. The fundamental target of control system is no labor with sickle cell sickness by 2020. The goal is keeping demise of patients from sickle cell emergency. The goal is to enhance wellbeing status in patients and along these lines personal satisfaction in patients of sickle cell pallor.

The fundamental center of this control project are early conclusion through screening of new conceived infant, antenatal screening and pre-birth screening, pre-adult screening, mass screening on mission mode, avoidance through guiding session before marriage, hereditary directing & building mindfulness in neighborhood community.\(^4^,\(^8^\)

So if fitting attention to all inclusive community is made another plume will be included to present controlling system. Doubtlessly making mindfulness in tribal ranges or individuals is intense undertaking for administration. Government needs bolster from other outer human services steady framework to include deliberately in such exercises to control proficiently and that is reason present survey is done to spread mindfulness in people groups mind that anyone can help government in supporting and making mindfulness.

In recent times we know that it is not so difficult to encourage people to accept a new practice because psychological perception of population is changing. Various systematic efforts through social, political, technological or psychological way can be implemented to bring such new practice. One such good example through political variable is ‘Swachata Abhiyaan’: Every person has perception which guides action. Many villages and population and
community do not have a link between health and current sanitary practices and therefore there is no reason to modify such practices. If general population start supporting in spreading awareness in tribal areas it will help in improving overall health related outcomes.

To develop faith in a concept and topic attention must be generated. The film stars are best way to reach to people and create such faith and awareness. Superstar Amitabh Bachchan can create awareness on Polio and super star Mr. Amir Khan can create awareness on Kuposhan and Vidya balan can explain importance of clean sanitation. So in same way if a superstar who is involved in such a noble cause and who is having a huge fan following can b ideal choice to create awareness even across country in general population which is prime importance. So currently star doing such noble deeds for human beings is only being human Mr. Salman Khan, one who always supports needy people. Support from local newspaper and news channels can be most helpful in creating such kind of awareness on a regular basis for creating awareness in general tribal population. To aware pharmaceutical professionals online journals are good choice for creating awareness into them so they can utilize it to spread awareness to others.

Small scale industries like sugar factory where major tribal population are in daily contact can arrange awareness stall and posters for supportive initiatives to government. Companies like which supplies milk can add a tagline on awareness on its milk bag as a supportive initiative to government for at least once in a month. Local and most selling brand like wafers and general good selling companies also can be a good support in such kind of initiative. Various stationary manufacturing companies can arrange poster making competition to promote awareness in school going children. The non government organization can arrange an awareness camp and start a campaign to create awareness in various communities on a regular basis and in various areas like school and colleges and gram panchayat or government offices where people get more access to such program.
India is mainly relying on its youth and higher secondary school students and teachers are best choice as they are going to be future of our country. Proper education and awareness into them can guide them in a proper direction. Because everyone knows that teen age is perfect age to absorb any message and we can mould any students towards a proper direction because they have good grasping capacity in teen age. Community pharmacist is best one to do such kind of education and awareness related activities. Because community pharmacist is link between public and health care sector so he/she can guide population very well about disease and its complications. Blood bank and pharmacist working at primary health care center can also aware population but it will increase burden on their overall responsibility. The vision is very clear “healthy India can make wealthy India‘. As we know day by day quality of life by population is decreases and prevalence of number of new disease are increasing.

Like swine flu and Ebola which was studied by students only in textbook are now striking in various states of India. Health care sector needs to be emphasizing on control program which doesn't require more funding. Proper implementation of ideas and concept into field of community pharmacy with a stand-up responsibility by every pharmacy colleges and students can add a great improvement in health department. If every pharmacist once tries to aware community about health it will be a great help to society. The aware 3 program concept inspired from Swami Vivekananda Slogan Awake arise and do not stop till you reach goal with a group of 26 students initiated to spread awareness in community on various disease and its causes and symptoms and management and inform about government facility available for it. Till date this group had started spreading awareness in community on various disease and its causes and symptoms and management and inform about government facility available for it. Till date this group had started spreading awareness on various parasitic diseases like malaria, dengue, Leptospirosis, Chikunguniya and current prevailing disease like Ebola and Swine flu.

Other common youth problem like Acne and old age problem like joint disorder and importance of calcium in old age is also covered. The program also
achieved support from hospital in studying drug prescribing pattern in diabetes and hypertension. All work carried out is already published in international journal of pharmaceutical science and bio-scientific research for providing platform to students and to mention importance of awareness to social world. Since last fifteen years Indian pharmaceutical industries expand lot in terms of turnover but in terms of new molecular research still we are far behind than other countries. India became hub for clinical trials few years before may be because we have number of patients who ready to participate in trials for money. Now time comes when even clinical trials are shifting to china may be population is reason. Investing millions of rupees in research needs output at some point of time so aware3 program initiated with a vision to healthy India to become wealthy India. If continues awareness at village level with door to door communication spread on regular bases it will impact on vision and belief of population at one day.

Various researches was done on assessing knowledge, attitude and behavior of youth on sickle cell anemia in African and American countries but in India very few studies were carried out but that too not in general population. Blood samples were collected and involved participants were generally aware. So if population at risk, tribal population especially youth at starting age if being aware on regular basis might be better option for future of better sickle cell control program in India. The community pharmacist at graduation level if enforce to in such kind of activities it will great help to healthcare department and education system too. In such activities government should encourage graduation level community pharmacist and provide open galaxy to explore their creativeness to help government in developing healthy India. Such kind of activities is still lacking. The extreme cases in sickle cell frailty may bring about further intricacies including, strokes, bone corruption (like avascular putrefaction) and intense or incessant sort kidney disappointment. Some sickle cell patients likewise have possibly vilifying signs including jaundice because of short existence of red blood corpuscles, leg ulcers and short stature. This is frequently encouraged by variables, for example, contamination, drying out, fatigue and
adjustment in temperature or climate might regularly warrant hospitalization of customers.

It is essential to make a note on social and ecological elements, liable to contribute in pathogenesis of psychopathology in sickle cell pallor. The essential component of current social environment is state of mind & impression of non-endures towards influenced persons. A few studies had affirmed importance of disparaging states of mind in youngsters having sickle cell sickliness & attention is for most part on encounters of youngsters with sickle cell anemia. Predisposition hereditary screening & advising ought to be most critical center of endeavors for controlling sickle cell paleness in creating nations. The reason is screening is similarly less expensive & far less intrusive than pre-birth determination. In addition, mental & financial issues at danger are far simpler to oversee than when a few must settle on pre-birth finding & specific fetus removal. This kind of control of sickle cell infection has not been sufficiently given conspicuousness in different nations like Nigeria and Africa. For avoidance of hemoglobin issue through state funded instruction is moral and practical choice. Illustration is spreading consciousness of one's bearer or sickness status & hereditary guiding on subject of conceptive decisions. Different alternatives like aversion through pre-birth finding and specific premature birth of influenced hatchlings are not mentally worthy by broad groups. Moreover, senior auxiliary school understudies are ordinarily seeing someone that may in end lead to marriage in future, so issue of pre conjugal screening may be of concern, as this may be influenced by existing learning and state of mind to sickle cell iron deficiency. This is vital to aversion endeavors subsequent to illness is preventable.

In this manner, understanding information about sickle cell legacy, its wellbeing and conceptive wellbeing ramifications and additionally conduct towards individual with sickle cell weakness especially among auxiliary school understudies is vital in regards to restricting spread of sicknesses. The point of this study was to survey information and conduct of auxiliary school understudies on sickle cell infections. Teaching people in general about dangers connected with sickle cell characteristic can help people settle on educated choices about
quality testing and diminish bigger populace of India that enter youngster bearing age with no information of their risk.

Inherited direction gives individuals and society autonomy to settle on instructed decisions. Taught decisions are fundamental for any genetic test incorporating conveyor screening with objective that individuals can settle on best decision about testing for themselves. Genetic conditions, for instance, sickle cell illness, G6pd, Thalassemia infection are likely most broadly perceived conditions where inherited guideline may have general wellbeing significance. Instructing at threat masses about transporter status, giving them information to settle on taught decisions, and educating them on preferences and imperatives of testing can light up these individuals. The result makes free individuals who can settle on instructed decisions. As we realize that there is no standard of consideration to cure sickle cell paleness is accessible so making mindfulness in tribal populace may be one conceivable choice. The religious conviction and absence of fitting mindfulness on hereditary and premarital directing it may be exceptionally repetitive strategy to spread mindfulness in such group individuals.

1.1.1 View of World health organization:

In its report world wellbeing affiliation determine that organization of sickle cell sickliness (hemoglobin issue) has stayed lacking & national control undertakings does not exist. The key workplaces to supervise sickle cell whiteness patients are typically truant. World wellbeing affiliation also said that precise screening in sickle cell paleness is not a run of mill practice and finding for sickle cell feebleness is regularly made when a patient goes with a paramount clinical trouble. Clear, less extravagant & especially fiscally astute decisions like usage of penicillin to neutralize distinctive defilements are not by and large available in various countries. The guideline highlight of expansive direct to sickle cell pallor patients is early intercession for preventable issues with torment organization pharmaceuticals, hostile to contamination operators for ailment shirking, support for sponsorship and folic destructive to cop up with loss of red blood corpuscle and high fluid intake.³
Without a doubt, even world wellbeing affiliation also said in its report that in most of countries where sickle cell whiteness is a most key general wellbeing concern. According to level of general wellbeing issue there must be a broad technique for balancing activity & organization of sickle cell iron inadequacy is basically required. Undertakings like observation & guideline must be passed on in gathering and common level through vital social protection structure. It will assemble open care about issue & broaden survival of affected individuals besides keep exhaustive group to wind up impacted. The most key test in hemoglobin issue is in this way to improve projection for execution of examination for patients with sickle cell whiteness in making countries.

1.1.2 Initiative from Gujarat government:

Gujarat government amongst first state to took activity to control sickle cell pallor. The prime objective of control system is no labor with sickle cell illness by 2020. Another imperative point is aversion of death from sickle cell weakness emergency & to enhance wellbeing status & personal satisfaction of sickle cell iron deficiency patients.4 In hemoglobin issue counteractive action can be performed through premarital advising, hereditary directing and building group mindfulness. The ebb and flow study extending range of attention to higher optional school going kids living in sickness winning rustic who are at purpose of adulthood to be secured in attention to have significant effect on control program with better results.

1.1.3 Why need awareness?

It is true that it is very difficult to make people to accept a new practice or thought or concept. It requires systematic and step by step efforts and also needs attention simultaneously to number of different variables like economical and psychological, administrative and technological and political amongst one important variable might be relevant to influencing health awareness and health problems.

That’s why initial step in persuading individual or tribal community or area to change their behavior is to create in them a desire to change and that will only possible if they satisfy that change will help them. There were many studies of
awareness in college students and school going children performed in Nigeria\(^5\) and United states\(^6\) but still in our country very few attempt in terms of creating awareness has been made like but that too on sickle cell patients\(^7\) so there is no study carried out to assess general students perception and awareness about disease. Actually that might be better and more appropriate option to create awareness because to control autosomal recessive disorder awareness can’t be restricted to affected population only. It should reach to entire tribal population and surroundings so they can have a better vision for sickle cell anemia and their perception toward it. For that everyone must be agree that health care and community pharmacist can be sole choice. Especially in such area as health care education or creating awareness is equally as important as emphasizing on management and cure of disease.

Sickle cell sickliness continues being overall wellbeing issue that acquaints genuine troubles with our restorative administrations structures. The review of sickle cell paleness composing demonstrates extraordinarily necessity for more government supported preparing and care on sickle cell iron inadequacy in India especially tribal parts of country. In examination with other steady disorders and hemoglobin issue sickle cell disease stays one of base understood and most bewildering restorative conditions by social protection workers moreover for general populace and furthermore smallest financed blood issue.

The action on sickle cell whiteness for screening is of national sensitivity toward sickle cell illness; it can make a positive part. Yet troubles in light of sickling of red platelets subsequently continue being a significant issue to patients and specialists in today’s helpful world. In fact, even Physicians still stay bewildered by characteristic and clinical intricacies of sickle cell disorder and in this way sickle cell illness researcher are endeavoring to find a cure to pivot “sickling effect” in human body.

So, current study with aim to aware students who are at their prime age are main target population by educating and assessing awareness into them so positive initiative can be begin. Gujarat government is also doing continues effort
in screening of sickle cell patients. No doubt there are few studies performed on assessment of awareness in south Gujarat were performed but it was limited to sickle cell patients only.

This study may benefit government to find a new vision and mission in control of sickle cell anemia program in future. In present study, without any collection of blood samples or without and psychological enforcement awareness is created in public.

The purpose of this study is very clear as till date there is no study performed by healthcare professional in general population to create awareness on sickle cell anemia. It is actually responsibility of pharmacist on grass root level to rise up level of awareness in public. So as a responsibility to create awareness in higher secondary school in valsad district, part of Gujarat state which is prevailing part of sickle cell anemia.

No doubt hemoglobin disorder like Thalassemia, sickle cell anemia & glucose 6-phosphate dehydrogenase are prevailing disease in surroundings. If current youth get encouragement and education through awareness sessions like this initiative it will be possible to control on any disease or disorder. Awareness can at least make people supportive and kind toward sickle cell patients. May be concept is at pilot level but on continuous level study it will be possible to have good results in favor of controlling activities.

The objective for study was inspired from Swami Vivekananda and modified for youth is that awake, arise and aware 3 and make India sickle cell free by 2020. This is a support program from a healthcare community pharmacist for development of better healthcare for government.

The current study will also be helpful in mapping disease and also beneficial for schools to have some basic information about sickle cell anemia so they can take some extra care of those students. The recommendations for wellbeing related prompting is various & contrasted. Since people can have various ailments and no one needs designate any deficiency to teacher who is apparently not aware of understudy's having sickle cell feebleness in class. Of course main problem is level of care for premarital and neonatal screening and
inherited coordinating which can be control by making care into understudies where illness is by and large dominating. By making care on sickle cell in any occasion sickle cell patients may not pick wrong calling for them which may incite a ridiculous early going by virtue of sickle cell crisis.

Additionally, existing research on sickle cell iron inadequacy focuses on recognition with illness among higher helper understudies in distinctive schools of nation parts of valsad district. In valsad area, prevailing piece of understudies are has a position of distinctive cast generally occupied cast and in converse class in who conceivable outcomes of power is more. As needs be, absence of information exists as for care among higher discretionary youngsters. This study thusly attempts to build up that whether higher discretionay understudies are aware of sickle cell iron lack, legacy case of ailment, clinical appearances like sign and evidences, pharmaceuticals, government program and reinforce avaibility or not. This focus on in like manner tries to check that whether higher assistant understudies are aware of importance of screening in sickle cell & genetic coordinating schedules or not. If they are not than this study will help them to know and get it. This study in like manner chooses availability of pre-adult to consider ailment and their excitement to spread consideration regarding other masses to continue with chain.

Another component that can help address this issue is setting open figure in forefront for sickle cell disease. Ideally, anyone can help and start advancement on sickle cell ailment care and reinforce this chain. Individuals when all is said in done figure would more than likely create additional backings for examination, treatment and even cures for sickle cell sickliness. Open interest would increase more therapeutic get ready on this particular disease and help discard perspectives and presumptions of this contamination. With more guideline and get ready, patients will have ability to get perfect thought and thought, may be more centers can be manufactured to unequivocally treat this ailment in high-risk bunches.

Engaging extensive variety of media to delineate and focus issues of persons with sickle cell iron lack in a way unsurprising with premise of present
custom; Promoting care get ready venture as to sickle cell whiteness and its intricacies and must push to give a rate of supportive rights to patients of sickle cell sickliness.

If backing gave at all levels of guideline system, fusing in all youths from early age where truly genuine muddlings and issues are winning, a perspective of profound respect for benefits of persons with sickle cell fragility will deliver.

India gets chance to be rich India, a honest to goodness gathering medication pro can expect a noteworthy part and task performed with flawless responsibility can raise esteem and estimation of gathering medication expert generally speaking people at some point later on. Since current circumstance reveals that level and estimation of gathering medication pro is decreasing orderly.

The roaming objective of study is unreasonably bolstered that if gathering medication master incorporate and contribute in wellbeing guideline can provoke headway of sound India. In occasion that gathering medication authority performed errand of wellbeing preparing with impeccable responsibility and charitable perspectives, than level of gathering medication store in India will redesign.
1.2 PROBLEM ON HAND:

Sickle cell paleness is innate issue. Sickle cell pallor is important wellbeing issue generally found in tribal people. The tribal's are therapeutically transparent a spot with low budgetary class moreover less careful and trained about essentialness of wellbeing and innate qualities and autosomal issue. More than 50 rate of world sickle cell quality transporters are in India.

On another side to expect a reliable adherence on blood spread hydroxyurea is troublesome from tribal's, and quality treatment and undeveloped cell transplant are radical decisions for cure in light of way that who can tolerate expense of it and to what number of government can hold up under, so it will be sensibly not too beneficial option for organization. Still it is not a need framework at national level yet rather assembly of Gujarat is improving clearly moves to screen sickle cell patients.⁴
The quantifiable data in light of pervasiveness rate of sickle hemoglobin had isolated surveyed numbers in assessment 2011. The result as a rule exhibits that sickle cell patients are growing as people increases in tribal reach and thick boondocks region.

So while differentiating for regularity rates of sickle hemoglobin in India, it was foreseen that there were more than fifty lakh persons transporters/sickle cell trademark and two lakhs sickle cell contamination patients among tribal's isolated from others in India.9 yet if we look at 2011 assessment 1, 78, 62,455 were sickle cell quality sufferer and 13, 39,684 sickle cell affliction sufferer amongst tribes in India.4

In any case, restorative & mental cost of supporting sickle cell sickness patients is tremendous and compasses a lifetime. The hematopoietic undifferentiated living being transplantation can revoke sickle cell sickliness evidence. It is finest decision for cure today however this treatment option is underutilized in light of way that under 500 transplants were represented in point of convergence of overall blood & marrow transplant investigation in light of broad peril of bleakness and mortality.10

The main problem watched that individuals between ages of 19 to 30 nonattendance of perception of essentials of sickle cell sickliness. That why a need exist for additional sickle cell pallor screening, preparing & coordinating among understudies at prime young person age.12

It was in like manner recommended that various segments add to unlucky deficiency of resulting exhorting and screening and these components join eager uneasiness on gatekeeper's part about finding that their infant youngster had a sickle cell delicacy, keeping and trepidation from securing being accountable for bringing on disease.13

The other issue may be unlucky deficiency of sweeping seeing about pathogenesis of sickle cell sickliness. Also, moreover it is watching that fundamental focal point of clinical thought turns around treating troubles of sickle cell contamination rather than generally focusing on abhorrence of drawbacks of sickle cell disease.11
High transcendence of sickle cell iron insufficiency quality has been insisted in particular zones of tribal gatherings of Gujarat including Bhils & Dhodias from Panchmahal area, Naikas, Dublas, Koli, Dhanka, Gamit, Vasava, Bariya, Vaghari, Kukna, Varli, Chaudhari & Halpati.\(^\text{13}\)

Tribal records for 15% of entire masses of Gujarat state and passed on in diverse territories of Gujarat state like Panchmahal, Banaskantha, Sabarkantha, Vadodara, Narmada, Bharuch, Valsad, Surat, Dang and Daman.\(^\text{14}\)

The other key issue close by is that even in wake of pondering ailment still less legal steps are taken to control & keep contamination from national level is not taken yet. As present government underscoring on make in India thought for headway of country and Indian people, this kind of care movement in moving of government can be beneficial to make strong India.

One such trust in sickle cell is quality treatment and youthful microorganism transplant system however as we most likely am mindful this is issue of tribal people so who can tolerate expense of such lavish decisions. The another basic perspective is with hydroxyurea organization, it is reasonable to screen platelet implies any untoward effects so again this kind of lab report spread and routine exploration office fields are out of compass of anguish tribal people.

The current work is also encompasses one of descriptive points stated in world health organization recommended activities in sickle cell anemia prevention program. As south Gujarat tribal area is more prevailing area of sickle cell anemia cases and because of socioeconomic condition or lack of awareness or lack of patient counseling or education or environmental factor or may be for any other reason tribal populations were not in a position to afford a frequent hospital visit or blood transfusion expanses or hydroxyurea tablets.

May be due to lack of awareness on disease and proper treatment and counseling, even sickle cell trait patients were also suffering from various complications which are not in a focus or mind of any healthcare provider. Because these kind of clinical changes are required practical understanding rather than theoretical observations in sickle cell patients.
Even though government is active in sickle cell campaign but a proper research and development of a cost effective alternative system medicine may become a boon for tribal population. Eventually it will also help government and also helpful in improving quality of life of population. But till effective medicine for management come in enforce there is a dire need to control increasing number of sickle cell cases. So in addition of continuous research on management, if proper counseling and education through regular awareness program by a healthcare person can give additional support development of healthcare sector of country.

For surveillance and community education and spreading awareness about disease various awareness program in school and villages are carried out as initiative chain to aware all young generation of tribal population. That will provide platform to pharmacy students to participate in community level to involve in such kind of program. The program initiated by author has given name aware 3 concepts and try to spreading awareness about disease to as much tribal people as possible. Because other than diabetes and cancer, this sickle cell anemia in tribal area is also like a life threatening disease silently progressing and affecting population in south Gujarat.
1.3 JUSTIFICATION OF CURRENT WORK:

It is always said that work done for doctorate degree should be always focused towards how beneficial it will be for population. So, this initiative is mainly design to be helpful to society by creating awareness. Awareness can always be very handy tool to control any problems. Other countries are already emphasizing on screening and education on sickle cell anemia, than our country can also do such initiatives.

The simple reason for justification of topic of research is working on disease on which even our government also focusing and performing various activities to control it. Awareness program can draw attention of population where disease is prevalent. Thorough awareness program can guide to patient and guardians to manage sickle cell complication in emergencies. If by spreading awareness thorough proper step by step plan and implementation, day will come when other countries will be following same to support their healthcare system to fight against hemoglobin disorder sickle cell anemia.

By assessing awareness positive message can be convey to all schools and people that healthcare system by community pharmacist are still working with selfless motives. Secondary on regular assessment of such things students also encouraged to participate in such activities.

By assessing awareness a proper idea about perception of students living in prevailing areas can also be obtained. The point which justifies this research is a community pharmacist with active participation can bring a massive change in awareness on health.

In recent times even our prime minister of India emphasizing on awareness and use of social media to enhance public awareness, current study also being a part of such activity in developing India.

The involvement of such important topics in study will become a boon for all tribal students because, it's important for them as very few of them only go for higher education.
1.4 FUTURE SCOPE OF STUDY:

1. The study will be supportive and beneficial to government to have a database on a micro level for Valsad district, Gujarat about current status of awareness of youth about disease.

2. The study will help government to implement same program in their control program so screening program can become more efficient and effective and at least people remain aware about screening reason.

3. This program will be also useful to assess awareness of existing and prevailing conditions in rural area of Valsad district, Gujarat.

4. The program helps in development of rural youth development.

5. Awareness study may create attention from other non profitable organization and media and at point of time sickle cell anemia may be able to get more attention which will be helpful.

6. The importance of pharmacist in health education may justify importance in creating awareness and may be utilize it on a large scale.

7. May be government implement a session of education on sickle cell anemia awareness in their upcoming education schedule.

8. This current aware3 concept may become sparkling event in this fight against sickle cell anemia program for nation.

9. This study also helps in extracting role of community pharmacy at graduation level so colleges and students will get a platform to perform their best at community level.
1.5 IMPORTANCE OF AWARENESS:

In recent times we know that it is not so difficult to encourage people to accept a new practice because psychological perception of population is changing. Various systematic efforts through social, political, technological or psychological way can be implemented to bring such new practice. One such good example through political point of view is *Swachata Abhiyaan*. Every person has perception which guides action. Many villages and population and community do not have a link between health and current sanitary practices and therefore there is no reason to modify such practices.

It is unbeatable truth that sickle cell anemia is a social liability now especially in tribal areas. To control spreading of such disease and prevention is not only responsibility of government and doctors and research scientist but it is responsibility of each and every member of pharmacy field and also every members of society. Because generally in rural as well as in urban area majority were in opinion that it is responsibility of health personal only. As large number of education of sexually transmitted disease were being implemented in schools worldwide same way education on sickle cell and hemoglobinopathies can be implemented.

The destinations, legitimate structure, length and substance, fitting usage methodology & different qualities may be on pilot scale yet need to plan for legitimate sickle cell and other hemoglobin issue. For sickle cell patients' special laws, policies, institutions, social arrangements can influence ability of sickle cell control program. Starting late, more thought ought to be paid on options of changing social course of action for sickle cell iron inadequacy neutralizing activity. The decisions may call social systems, social interventions and normal mediations. The tries apply to make social conditions and care in people which support wellbeing headway & danger diminishment can wind up being fruitful in better places.

If awareness program run simultaneously with government screening program, in all colleges and school than real impact about surveillance and health education on sickle cell anemia will be possible.
For continuous spreading awareness on disease and for attracting youth aware 3 group design a logo for awareness campaign. This will be adding more positive feeling into spreading and creating awareness into general population.

1.5.1 Introduction to Aware3 group:

Aware3 group is designed by research scholar and providing platform to perform essential role as community pharmacist. The mission is spread awareness chain and achieve healthy India by 2020. The vision is very clear healthy India can make wealthy India. As we know day by day quality of life by population is decreases and prevalence of number of new disease are increasing.
1.5.2 Involvement of Aware 3 in sickle cell awareness:

Sickle cell shortcoming is a blood/hemoglobin issue. Sickle cell is most for most part winning in tribal domains/parts of India. Various states of India like Gujarat, Maharastra, Orissa, Tamil nadu, Madhya Pradesh where prevalence rate of sickle cell whiteness is between 5-34%.\(^4\)

There is no standard of sustain sickle cell shortcoming is open, so there is a discriminating need of monetarily sagacious organization for upgrading individual fulfillment of patients. Open care and wellbeing preparing can expect a key part in controlling this hemoglobin issue and it can animate masses towards such activities like setting up newborn child screening and premarital screening and genotype ID for sickle cell shortcoming.

In current circumstance highlight centrality of care if made in fitting channelized path all things considered people, it may update adherence in wellbeing upkeep rules & assemble general major data & care among people who are affected besides those not impacted so they can be adequately perceptive to give organization in crisis condition and general improving social protection access and use with support of pharmaceutical human administrations supplier.

The concept is very simple if superstar Amitabh Bachchan can be a role model in Polio elimination program then super-star Mr. Salman Khan might be proper choice for such a noble cause in creating awareness because fact is message from personality does impact in mind of people faster.\(^9\)

1.5.3 Current options to reduced Hemoglobin disorder:

Hemoglobinopathies can be adequately reduced through essential balance of disease organization and neutralizing activity programs. Sickle-cell iron insufficiency is autosomal inert sort of disarray so it can't be cured; however condition and evidences can be managed by: High fluid affirmation & sound energizing eating regimen and folic destructive supplementation & torment killer pharmaceutical. Surely, even prophylactic immunizing agents poisons are used for keeping away from infections.\(^8\) 16-17 The most functional technique for
diminishing heaviness of hemoglobinopathies is to supplement ailment organization with diverse preventive undertakings. Practical and tried and true blood tests can perceive couple at peril for having youths affected with sickle cell iron insufficiency.

This genetic screening is really valuable in before marriage or before pregnancy, to allow couples to discuss soundness of their team. Coming about innate coordinating educates transporters with respect to sickle cell whiteness that is perils that may be come to their children and treatment may be obliged, if impacted by a hemoglobin issue. Pre-conception screening of any genetic sicknesses rises accurate well, honest to goodness and gathering issues that oblige fitting thought.16, 17

1.5.4 What activities for preventing & controlling Hemoglobinopathies?

Extend care in gathering of overall weight of sickle cell sickness. Generally standard anxiety should be on endeavor to lift sensible access to wellbeing organizations in gathering section. Give investigative and specific support to regions for shirking and organization of sickle cell iron inadequacy. Additionally, last however most basic is to progress and engage and support investigation work to improve individual fulfillment for those affected. One of asks about on sickle cell pallor contemplated that between 19-30 years age individuals are having nonappearance of key understanding of sickle cell anemia.8, 12

Along these lines, present framework was a movement to show understudies from their instructing or secondary school period where they can have crucial data and care about most detectable conditions of sickle cell sickness. So purpose behind study is to spread care in understudies of tribal area who are at peril of having this blood issue.

1.5.5 Sickle cell anemia control & prevention program:

In India, Gujarat government was first to take activity in controlling sickle cell frailty. The fundamental target of control system is no labor with sickle cell sickness by 2020. The goal is keeping demise of patients from sickle cell
emergency. The goal is to enhance wellbeing status in patients and along these lines personal satisfaction in patients of sickle cell pallor.

The fundamental center of this control project are early conclusion through screening of new conceived infant, antenatal screening and pre-birth screening, pre-adult screening, mass screening on mission mode, avoidance through guiding session before marriage, hereditary directing & building mindfulness in neighborhood community.4,8

So if fitting attention to all inclusive community is made another plume will be included to present controlling system. Doubtlessly making mindfulness in tribal ranges or individuals is intense undertaking for administration. Government needs bolster from other outer human services steady framework to include deliberately in such exercises to control proficiently and that is reason present survey is done to spread mindfulness in people groups mind that anyone can help government in supporting and making mindfulness.

1.5.6 How we can create awareness?

In recent times we know that it is not so difficult to encourage people to accept a new practice because psychological perception of population is changing. Various systematic efforts through social, political, technological or psychological way can be implemented to bring such new practice. One such good example through political variable is ‘Swachata Abhiyaan’.

Every person has perception which guides action. Many villages and population and community do not have a link between health and current sanitary practices and therefore there is no reason to modify such practices. If general population start supporting in spreading awareness in tribal areas it will help in improving overall health related outcomes.

1.5.7 How can create awareness with impact?

To develop faith in a concept and topic attention must be generated. The film stars are best way to reach to people and create such faith and awareness. Superstar Amitabh Bachchan can create awareness on Polio and super star Mr. Amir Khan can create awareness on Kuposhan and Vidya balan can explain
importance of clean sanitation. So in same way if superstars who is involved in such a noble cause and who is having a huge fan following can b ideal choice to create awareness even across country in general population which is prime importance. So currently star doing such noble deeds for human beings is only being human Mr. Salman Khan, one who always supports needy people.

1.5.8 How media can reach to population?

Support from local newspaper and news channels can be most helpful in creating such kind of awareness on a regular basis for creating awareness in general tribal population. To aware pharmaceutical professionals online journals are good choice for creating awareness into them so they can utilize it to spread awareness to others.

1.5.9 How to utilize industrial resources for creating awareness?

Small scale industries like sugar factory where major tribal population are in daily contact can arrange awareness stall and posters for supportive initiatives to government. Companies like which supplies milk can add a tagline on awareness on its milk bag as a supportive initiative to government for at least once in a month. Local and most selling brand like wafers and general good selling companies also can be a good support in such kind of initiative. Various stationary manufacturing companies can arrange poster making competition to promote awareness in school going children.

1.5.10 How non-government organization can help?

The non government organization can arrange a awareness camp and start a campaign to create awareness in various communities on a regular basis and in various areas like school and colleges and gram panchayat or government offices where people get more access to such program.

1.5.11 Who can be target of sample for creating awareness?

India is mainly relying on its youth and higher secondary school students and teachers are best choice as they are going to be future of our country. Proper education and awareness into them can guide them in a proper direction. Because everyone knows that teen age is perfect age to absorb any message
and we can mould any students towards a proper direction because they have good grasping capacity in teen age.\textsuperscript{8}

\textbf{1.5.12 Who can create awareness?}

Community pharmacist is best one to do such kind of education and awareness related activities. Because community pharmacist is link between public and health care sector so he/she can guide population very well about disease and its complications. Blood bank and pharmacist working at primary health care center can also aware population but it will increase burden on their overall responsibility.\textsuperscript{8}

\textbf{1.5.13 Why Aware 3 group:}

The vision is very clear ‘healthy India can make wealthy India’. As we know day by day quality of life by population is decreases and prevalence of number of new disease are increasing.

Like swine flu and Ebola which was studied by students only in textbook are now striking in various states of India. Health care sector needs to be emphasizing on control program which doesn't require more funding. Proper implementation of ideas and concept into field of community pharmacy with a stand-up responsibility by every pharmacy colleges and students can add a great improvement in health department. If every pharmacist once tries to aware community about health it will be a great help to society.

The aware 3 program concept inspired from Swami Vivekananda Slogan Awake arise and do not stop till you reach goal with a group of 26 students initiated to spread awareness in community on various disease and its causes and symptoms and management and inform about government facility available for it.

Till date this group had started spreading awareness in community on various disease and its causes and symptoms and management and inform about government facility available for it. Till date this group had started spreading awareness on various parasitic diseases like malaria, dengue,
Leptospirosis, Chikunguniya and current prevailing disease like Ebola and Swine flu.

Other common youth problem like Acne and old age problem like joint disorder and importance of calcium in old age is also covered. The program also achieved support from hospital in studying drug prescribing pattern in diabetes and hypertension. All work carried out is already published in international journal of pharmaceutical science and bio-scientific research for providing platform to students and to mention importance of awareness to social world.

Since last fifteen years Indian pharmaceutical industries expand lot in terms of turnover but in terms of new molecular research still we are far behind than other countries. India became hub for clinical trials few years before may be because we have number of patients who ready to participate in trials for money.

Now time comes when even clinical trials are shifting to china may be population is reason. Investing millions of rupees in research needs output at some point of time so aware3 program initiated with a vision to healthy India to become wealthy India. If continues awareness at village level with door to door communication spread on regular bases it will impact on vision and belief of population at one day.

If proper support and platform provided to this program it can become national initiatives for better development of healthcare system in India. The all work of Aware 3 group is available on JPSBR online journal. The Volume 5 (2) of April-2015 is example of constant work by Aware3.

1.5.14 Current status on awareness on sickle cell anemia:

Various researches was done on assessing knowledge, attitude and behavior of youth on sickle cell anemia in African and American countries but in India very few studies were carried out but that too not in general population. Blood samples were collected and involved participants were generally aware.\textsuperscript{7,8,18} So if population at risk, tribal population especially youth at starting age if being aware on regular basis might be better option for future of better sickle cell control program in India.
The community pharmacist at graduation level if enforce to in such kind of activities it will great help to healthcare department and education system too. In such activities government should encourage graduation level community pharmacist and provide open galaxy to explore their creativeness to help government in developing healthy India. Such kind of activities is still lacking. The extreme cases in sickle cell frailty may bring about further intricacies including, strokes, bone corruption (like avascular putrefaction) and intense or incessant sort kidney disappointment. Some sickle cell patients likewise have possibly vilifying signs including jaundice because of short existence of red blood corpuscles, leg ulcers and short stature. This is frequently encouraged by variables, for example, contamination, drying out, fatigue and adjustment in temperature or climate might regularly warrant hospitalization of customers.

It is essential to make a note on social and ecological elements, liable to contribute in pathogenesis of psychopathology in sickle cell pallor. The essential component of current social environment is state of mind & impression of non-endures towards influenced persons. A few studies had affirmed importance of disparaging states of mind in youngsters having sickle cell sickliness & attention is for most part on encounters of youngsters with sickle cell anemia. Predisposition hereditary screening & advising ought to be most critical center of endeavors for controlling sickle cell paleness in creating nations. The reason is screening is similarly less expensive & far less intrusive than pre-birth determination. In addition, mental & financial issues at danger are far simpler to oversee than when a few must settle on pre-birth finding & specific fetus removal. This kind of control of sickle cell infection has not been sufficiently given conspicuousness in different nations like Nigeria and Africa. For avoidance of hemoglobin issue through state funded instruction is moral and practical choice. Illustration is spreading consciousness of one’s bearer or sickness status & hereditary guiding on subject of conceptive decisions. Different alternatives like aversion through pre-birth finding and specific premature birth of influenced hatchlings are not mentally worthy by broad groups.
Moreover, senior auxiliary school understudies are ordinarily seeing someone that may in end lead to marriage in future, so issue of pre conjugal screening may be of concern, as this may be influenced by existing learning and state of mind to sickle cell iron deficiency. This is vital to aversion endeavors subsequent to illness is preventable.

In this manner, understanding information about sickle cell legacy, its wellbeing and conceptive wellbeing ramifications and additionally conduct towards individual with sickle cell weakness especially among auxiliary school understudies is vital in regards to restricting spread of sicknesses. The point of this study was to survey information and conduct of auxiliary school understudies on sickle cell infections.

Teaching people in general about dangers connected with sickle cell characteristic can help people settle on educated choices about quality testing and diminish bigger populace of India that enter youngster bearing age with no information of their risk.\(^\text{15}\)

Inherited direction gives individuals and society autonomy to settle on instructed decisions. Taught decisions are fundamental for any genetic test incorporating conveyor screening with objective that individuals can settle on best decision about testing for themselves. Genetic conditions, for instance, sickle cell illness, G6pd, Thalassemia infection are likely most broadly perceived conditions where inherited guideline may have general wellbeing significance. Instructing at threat masses about transporter status, giving them information to settle on taught decisions, and educating them on preferences and imperatives of testing can light up these individuals. The result makes free individuals who can settle on instructed decisions.

As we realize that there is no standard of consideration to cure sickle cell paleness is accessible so making mindfulness in tribal populace may be one conceivable choice. The religious conviction and absence of fitting mindfulness on hereditary and premarital directing it may be exceptionally repetitive strategy to spread mindfulness in such group individuals.
1.6 PROBLEM/HYPOTHESIS:

Health may be perceived differently by different expert and by different people. Similarly people may have perception about health services and healthcare providers depending on exposure they have. That is reason discernment may assume imperative part in procedure of progress in perspective about wellbeing administrations and about human services suppliers.

So perception should be studied and opportunities need to be created for people to modify their perception towards health services. So initial step in education should be to created opportunities though which curiosity of individuals is around. The tribal area people may have same kind of problem towards health services and health care provider. The perception in tribal people towards sickle cell anemia and importance of awareness and screening needs to be studied and try to change it by creating opportunities on regular basis.

The awareness on sickle cell anemia and problem of its sufferer is largely being affected by psychological, economical, educational, environmental, religious and also by availability of health care services to them. To understand awareness on sickle cell anemia many studies have been carried out in different part of world like Africa, America where sickle cell anemia is prevailing.

The problem is even students in whom screening was done are also not so much aware about reason and information about screening unless they detected for sickle cell anemia. School is only platform where screening with proper education can change perception in students. The other problem is as all attention given to programs like Polio and Filaria, same as much important is not given by general population. The problem must reach on regular basis to general public for proper awareness.

Even in India too so many studies on awareness in many states have been carried out. But rarely studies in general population emphasizing youth who will be future of country have been carried out. These kind of study it will be accepted that health care sector and health care services both are equally important as a social problems like AIDS control, Child birth and Family planning.
in India. So, this descriptive study was designed to investigate whether higher secondary students attending school of Valsad district, Gujarat are aware of clinical manifestations, treatments, and genetic counseling methods for sickle cell disease. If not than make them aware through awareness session.

This study was similarly proposed to make sense of if understudies who are more disposed to be innately impacted by sickle cell illness are essentially aware of their sickle cell disorder status.

1. A study of sickle cell anemia for its prevention through awareness using public messaging system will be targeted towards rural school going youth.

2. Is there any significant differences exist in awareness between various caste students of rural area of Valsad District, Gujarat.

3. Do any significant difference exist in awareness between gender