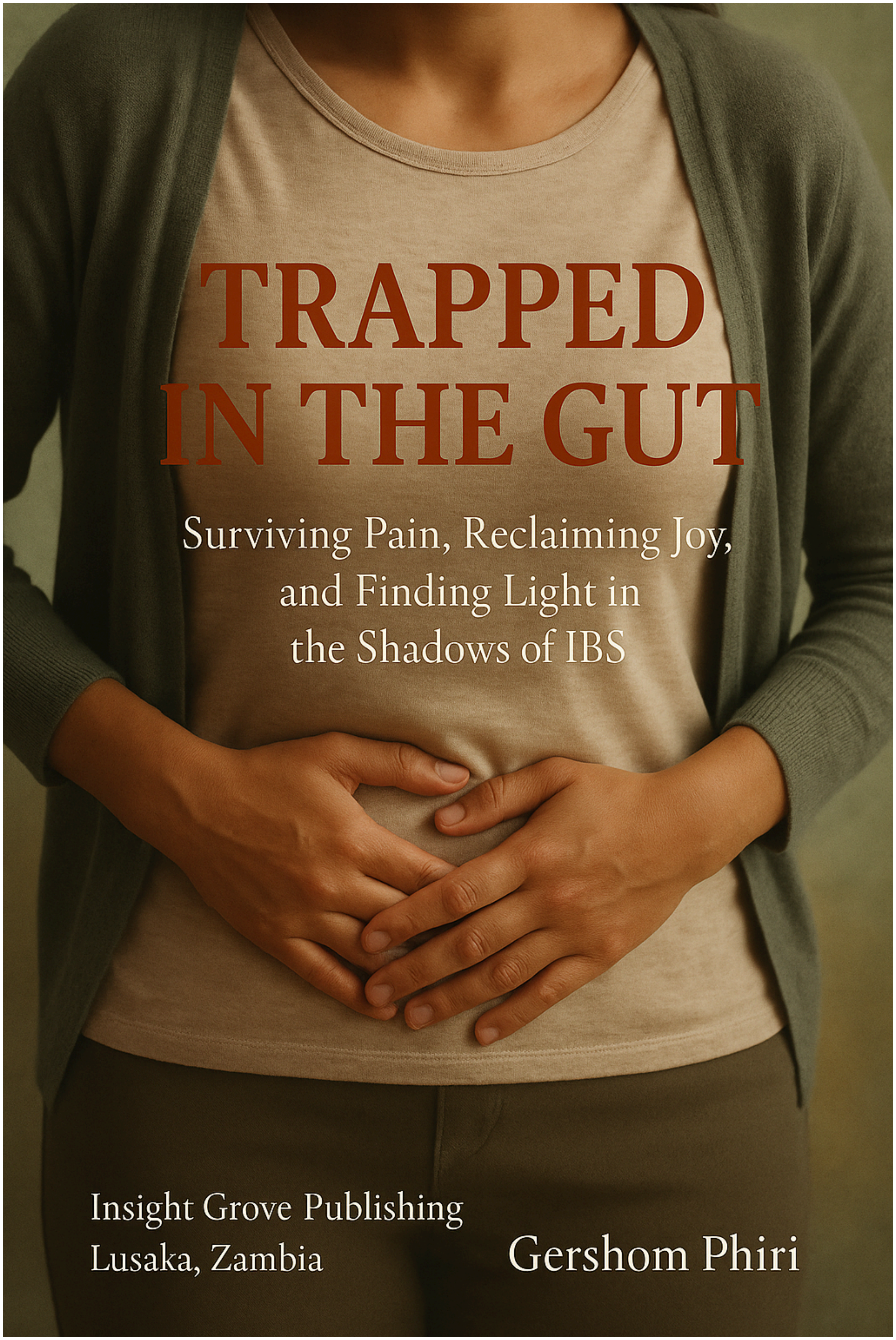

TRAPPED IN THE GUT

Surviving Pain, Reclaiming Joy, and Finding Light in the Shadows of IBS

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To those fighting a war few will ever understand.

To my mother, Beauty Katebe – for laying the first stones of my foundation.

To my uncle, Frank Katebe – whose steady encouragement gave me the strength to press on.

To my sister, Mutale Kabwe – for her sharp critiques and generous support that helped shape and sustain this work.

To my brother, Muzoma Phiri – whose thought-provoking questions sparked deeper curiosity.

And to curiosity itself – may it never be satisfied, and may it always lead us forward.

Authors Note

This book reflects the author's personal insights and research. It is intended for informational purposes only and is not a substitute for medical advice, diagnosis, or treatment from a licensed healthcare provider.

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Preface

Irritable Bowel Syndrome (IBS) and other so-called “functional disorders” have long lived in the shadowlands of medicine—described in symptoms but never truly understood. While modern science has made efforts to decode the mystery, most sufferers are still left to navigate a painful maze of uncertainty, misdiagnosis, and temporary relief. This book does more than document those symptoms or present data—it redefines how we should think about chronic gut disorders, how we got here, and what must change for a complete cure to be realized.

My approach is different. I take you beyond the surface-level symptoms and into the story of how modern medicine came to label and often mislabel these disorders. I show how our evolutionary wiring, environmental shifts, dietary changes, and even our stress-soaked lifestyles have conspired to turn normal gut function into a battleground. You’ll not only learn the science, but the why—and, critically, the how we must change to escape it.

Through the haunting realism of Jane’s despair and the cautious hope of Emily’s recovery, we examine not just what IBS is, but why it holds such power over its victims—and why so many doctors still fail to grasp its full impact. Unlike most clinical texts that end at symptom management, this work lays the groundwork for a genuine cure. Yes, a complete reversal—not just coping strategies. The ideas here will challenge convention, provoke thought, and light the path forward.

This is not just a book about a broken gut—it’s about reclaiming the freedom to live. Let’s begin.

Chapter 1:

Into The World Of Functional Disorders

> *“…….Patients described IBS not only as symptoms (predominantly abdominal pain) but mainly as it affects daily function, thoughts, feelings, and behaviors. Common responses included uncertainty and unpredictability with loss of freedom, spontaneity, and social contacts, as well as feelings of fearfulness”*
>
> **-Professor Drossman**

Jane’s Disappointment

Food and traveling were my biggest passions. My earliest memories take me back to times when it was my greatest delight to aid my mum in the kitchen. At meal preparation times, I would gaze in wonder at mum's seemingly unmatched skill to cut, sieve, mix, roast, boil, or fry different ingredients to come up with the most pleasing dishes to see. At the meal table, my patience would be rewarded with an amazing taste to please my taste buds. My curious nature to explore did not halt with food but found completion in traveling. Exploring new places brought a much-welcomed feeling of freedom and wonder. I found expression in trying new cuisines and learning about the different cultures behind the foods. By age 15, I had explored much of the world with my mum. I had been to Greece and learned of their rich history and simple Mediterranean diet. My curiosity then pulled me eastwards, where I was introduced to Vietnamese and Thai food and culture. Africa too was not spared. We traveled inland to learn the ways of nomadic tribes and the foods that marked their culture. These were among my happiest times.

At 25, my passion was still burning hot. A big shift was soon to take shape. I was at a crossroads. On one path lay the route to further my academics, which promised a prestigious and high-paying office job; on the other, my two passions. After much rehearsal with myself, a decision was made. It came in the form of a firm resolve to travel the world alone. My goal: exploring the world's cultures and cuisines in greater detail than before. A marriage of my hobbies was to be my way of life. For this new chapter, I decided to start documenting my journeys. A faithful stream of online followers came with me, pleased to be part of the travels. While it was my passion, sharing my journeys also proved a more than fine way to raise money to get by. In my spare time, editing my videos and engaging with my audience became my preferred activities. This free time also gave me space to craft and plan my next destinations.

On the map, my eyes were set on a country that had escaped my curiosity in my last trip east: India. Known for its rich culture and diverse food, I was more than pleased to set off on this new journey. Having tried different Indian dishes offered by a few scattered Indian-themed restaurants near me, I knew what lay ahead.

In Mumbai, the burning heat didn't seem to disturb the bustling activities around me. Neither was it going to disturb my goal. I resolved to immerse myself in the scene. Every few paces were marked with places to dine. One couldn't walk far before running into a mobile food cart or restaurant offering something different to eat. I set my sights on trying these street foods. There was a near-endless variety of places and foods to choose from. My curiosity was aroused. I was eager to taste all the different foods my eyes saw. This I did while streaming my travels to my online audience. Site after site bore witness to my curious nature, each time sampling what they offered while listening attentively to cooks narrating what constituted the dishes or their history. By sunset, I felt utterly exhausted. My steps bent toward my hotel. Despite my exhaustion, my explorative nature could not wait for daybreak to give me further opportunities to explore.

But my trip was about to take a turn for the worse. Around midnight, in my hotel room, I was plagued with a very bad case of explosive diarrhea—the worst I had ever experienced up to that time. Coupled with it was severe abdominal pain. The diarrhea added to the exhaustion from the day's travel. A burning fever soon followed. As if that was not enough suffering, nausea and vomiting joined the list of symptoms. I made endless trips between my bed and the bathroom, emptying both ends of my gut. At daybreak, I was in a different state from the day before. My enthusiasm was gone. In its place was a weak, dull, and pale bearing. I did not want to try the food anymore. The exhaustion that comes with diarrhea naturally meant I could not move around to continue. I knew something I had eaten made me sick. The sites of the food locations seen from my hotel balcony became a mockery. I could not walk out to continue my trips. I was bedridden the whole day. The diarrhea made me so weak, I couldn't muster the strength to edit some of my videos.

My stomach was upset for more than a week. In time, however, my symptoms seemed to subside. By then, the fever and vomiting had all but left me. But the bloating, diarrhea, and abdominal pain persisted. I was afraid to try any more street food. I opted to have what the hotel offered, estimating it to be safer than street food. With symptoms persisting, I decided to cancel my trip. After feeling much better, I decided I was in a better position to travel back home. My trip was ruined at that time. But I had learned the importance of carefully choosing what and where I ate after my experience with traveler's diarrhea.

I took some time off from editing at home, wishing to recover fully. Believing what I experienced was just a spell of very bad diarrhea and food poisoning, I could hardly guess what lay in wait for me. I couldn’t foresee that that was my final trip and the end of everything I perceived as normal. As if provoked, the symptoms returned with double the intensity. This time, fever and vomiting were absent. Yet, this offered little comfort to my symptom-tormented body because the pain from cramping, bloating, and diarrhea was more vicious than before. That was the most intense pain I ever felt in my life. For a while, the spasms and stings from the pain tempted me to think I was going to die. The pain was mind-numbing. Pain was so intense that I didn’t take heed of the chilling weather while I sweated in agony. Prior to this, I never imagined such magnitudes of pain existed. I was knocked down to the floor, curled up with my hands wrapped around my waist, wishing the pain would cease. It didn’t. The trips to the toilet were more frequent than before. This time the diarrhea was more severe. My stools were so loose I could hardly control them. The discomfort from bloating was also more pronounced.

I didn’t know what was happening to me. In this state of uncertainty, intense fear took hold of me. I was sure I hadn’t taken any contaminated food or fluids that time. I traced my steps and was certain I had not eaten anything besides what I had prepared myself. In my estimation, no reason was found to explain that attack. I feared I had a fatal condition. I feared I had colon cancer. My symptoms lasted for five days, then ceased. This became a pattern. These attack episodes would come seemingly without cause or warning and leave when they decided. It didn't help that I couldn't predict when they would come or how long they would last. I couldn't predict how intense the abdominal pain would be or how severe my diarrhea would grip me. I lay waiting in nervous suspense for the next attack. I was extremely afraid of the pain I was sure would come. I was afraid it would be severe. The uncertainty I faced during the times I felt better meant the absence of symptoms was never celebrated. Worse still, I couldn't tell why they were happening. This made me extremely nervous.

All seemed normal in the short windows when I wasn't having an attack. The only difference was a marked anxiety brought about by the fear of an attack. Besides that, everything else was normal. My abdomen didn't ache, my toilet frequency was normal, my stool was just like in my healthy days. No sensation of bloating was perceived. But these peaceful times would suddenly take a turn for the worse. My symptoms returned, and the cycles repeated.

These episodes meant I had to give up traveling. But I did spend time editing my other videos and chatting with my audience who were eager for more travel videos. Realizing I could no longer travel like before made me upset and at times depressed. Living indoors was never part of me. I felt a huge part of me was missing. Being forced to stay home by this illness gave me a torture of the soul as intense as the abdominal pain.

Social gatherings too were avoided. I could not function when having an attack. I could not concentrate on anything else. All my attention was drawn to the intense pain in my gut. It seemed impossible to focus on anything but the stinging pain. Even if I somehow could, the urgent need to use the bathroom would not allow me to continue sharing my attention.

Besides, social gatherings meant bathrooms were often shared. In my state, I didn't have the luxury to postpone a bowel movement. I opted to spend more time at home, where I was guaranteed a bathroom to myself. This was a turning point in my social life. The illness robbed me of the attention I gave to others, wishing and succeeding in getting all the attention. My dating life too was hampered. I could not dedicate enough time to it.

When I went out, careful planning ensured my routes coincided with places I knew had public bathrooms. This was a necessary precaution I learned the hard way after nearly missing the bathroom once. When I left the house, my greatest fear was being stuck in rush hour traffic with diarrhea knocking at my door. Moving outside my house became a carefully planned event, factoring in variables like rush hour traffic. The ironic thing was that I shifted from carefully planning my intercontinental trips to using the same precision when planning a trip to the grocery store. The most embarrassing and odd moments for me were and still are when I host visitors. It's embarrassing knowing they notice how many bathroom breaks I take. When my diarrhea is very severe, I hide behind the guise of taking long showers when in fact I'm experiencing a very bad case of diarrhea.

In the initial stages, I never told anyone about my condition. Opening up was a huge challenge. I viewed discussing bowel habits as highly private. For a while, I hid my condition from everyone. I suffered alone in silence. Besides, I didn't think it possible to find words to describe the amount of pain I felt to someone.

In time, I grew wise enough to see some patterns in the illness. I could predict with some level of certainty when an attack would come. I learned that certain foods seemed to trigger the episodes. Legumes like beans were among the sure triggers. This provided a sort of relief, for it meant I could go longer periods without any attack. I thought it smart to make notes of everything I ate in a book. When an attack occurred, the obvious conclusion was that the foods taken that day were to be excluded from my diet for good. The result was a long list of foods to be avoided. While this did help to some extent, it hardly lifted my spirits. In excluding a lot of food, my diet was restricted. I could no longer explore with food. I was robbed of the ability to use different ingredients to try new dishes. Striking at the heart of what defined me, this mysterious illness had single-handedly robbed me of my two biggest passions. What made me feel most alive and free was taken. A feeling of emptiness and bondage occupied the happiness that was once mine. The list took the fun out of cooking and eating. What's worse, I didn't want to replace the food I cut out with new food. I was afraid the new foods would be trigger foods. I was not afforded that luxury. I learned to view food as something dangerous. Eating was at my own risk. It seemed like a dangerous thing to do. I no longer viewed food as something to please me. Food was like a poison that was to be avoided. I feel the same way today. There was a strong feeling that my body would punish me for eating. Yet, I could not avoid it. My selection of foods was now severely limited. This new shift made me depressed. I could no longer go back to my former life. The disease put me in a prison from which I found no escape.

Oddly enough, my list of trigger foods also included most fruits. In my effort to try to heal myself, I foolishly believed adding more fruits to my diet and removing animal-based foods would greatly help me. I could not have been more wrong. Most fruits triggered the attacks. Yet, I was hesitant to add the fruits to my list of trigger foods. From childhood, I had been conditioned to think that fruits imparted health to the body. For added vitality, I was taught to increase my fruit intake. Yet, I encountered a disease that seemed to throw that norm out of the window.

In the passage of time, I learned that stress too was linked to when the attacks would come. I had a higher probability of having an attack when my mind was not at ease. I tried, and still do try, to control this variable but it is far too difficult. I can't have full control of when my mind will be at ease. Life takes the path it takes. Sometimes this means my mind will be stressed.

When this happens, I’m almost always sure of what follows. There are days where I have an attack just by anticipating one. The fear of an attack gives me stress which is always sure to result in an episode. In this state of anticipation, my gut appears to be in a state of heightened perception as if listening in on any stimulus that can trigger the symptoms.

My most severe symptoms happen when the attacks coincide with my menstrual cycle. The bouts of pain I experience during those times of the month are almost unimaginable. At those times, I watch my diet with double effort and try as much as possible to stay away from stress. Oddly, this in itself is stressful enough, and it serves as a trigger most times. The painful cramps I get during my menstrual cycle serve as fuel that makes the abdominal spasms burn hot.

In time, however, I knew that I needed extra hands to help contain the symptoms. The only way to do this was with the unwelcome over-the-counter meds from the local pharmacy. From childhood, I hated relying on meds to reverse an illness. For mild illnesses, I let time heal my ailments. But that luxury wasn’t mine after I was hit with that mysterious infection. I started taking antidiarrheals to help manage the diarrhea. But they hardly worked. Most times, they would make my bloating and pain worse than before. This made me quit taking them. Most of the antidiarrheal meds came with new symptoms like changing my mood or affecting my sleep. The pain from this illness seemed too high for common painkillers to handle. The strongest painkillers only managed to reduce the pain slightly, all while bringing a list of side effects I had to fight.

In time, I saw that closing up was not serving me well. Especially after all the meds failed to contain the pain and diarrhea. I knew I needed to open up to someone. Coming out of hiding, I made mum aware I had been made a prisoner for months by a mysterious illness. Her initial disappointment at my closing up was soon replaced with fear. She feared I had colon cancer or something fatal. A trip to the doctor’s office was immediately planned. A sense of relief came over me after opening up. The hope that a doctor would be able to reverse the condition was quite pleasing. This was the first time my mind was free in a long time. In part, my relief was born from the expectant belief that I would get my former life back.

At the hospital, I was desperate to make my suffering known to the doctor. This was noted in my anxious and pleading tone. I was finally in the presence of one who could bring relief to me. Disappointingly, the doctor did not share the same urgency I had. I suppose this was because he had seen many other patients like me. My case was not new or special. This was like any other day for him. He hesitantly asked me a series of questions which included my medical history, my diet, and lifestyle among others. I opened to him the scenes of the previous months. I was sure to point out my food poisoning experience in India and urged that this was when my woes began. He proceeded to perform a series of physical exams on me. A series of lab tests were ordered. He handed me a new diet plan which showed a list of foods to be avoided. This meant I had to exclude more foods from my already thin diet. A series of medicines were prescribed including antidepressants which he advised were for my pain. Using antidepressants for my pain was an odd note for me. It made me wonder what this illness was.

One vital question was not answered, however. The doctor made no mention of what was wrong with me, or whether it was fatal. No label was given to my mysterious illness. I was informed more tests were needed. I went back home with a feeling of dissatisfaction. My dissatisfaction was born, in part, from the indifference shown by the professional who I supposed was trained to show care.

The medicines from the new prescription came with a whole series of side effects, including dizziness and fatigue. The ones that worked well, for a time at least, would make my other symptoms worse. I could not have it all. It seemed to me that relief of one symptom came at the worsening of another. To get a normal stool pattern, my pain doubled. Sometimes, the antidiarrheals would give me extreme constipation. The side effects made me halt using some of the medicines without my doctor's consent. Then, with an unscheduled visit, I went back to the hospital seeking further help. Stronger meds at a higher dose were prescribed in place of my unfinished meds and more tests were ordered. Nothing much changed. This was the new pattern. Test after test was ordered to ascertain the mysterious condition. Prescription after prescription was given in an attempt to handle the symptoms. But a clear and concise description of what was lacking was missing. A prescription of medicines to reverse my symptoms was not issued. I was tempted to think my doctor, who up to now had not given a name to the illness, was ill-qualified to diagnose my condition. I was tempted to make a new appointment with another doctor. But I was compelled to finish what I started, having come this far.

Some of the tests were very embarrassing for me. This was the case when I had to perform the colonoscopy. For this particular test, a flexible tube bearing a mounted camera was inserted in the anus in an effort to get a visual confirmation of anything out of place. Preparing for the colonoscopy was hard too. I had to stay for more than a day without food to clear out my gut. The results of some of the tests that were performed on me took a long time to be released. The time waiting for the results was spent in agonizing suspense. My worry doubled. I feared the results would be positive for what they tested. I feared what I had was fatal. Worse still, some of the tests the doctor ordered made me find myself in a long list of patients waiting to have the same tests done on them. I was impatient for a complete diagnosis. I desperately wanted to know what was wrong with me.

Some of the tests required considerably large sums to be paid. This made my situation worse. The mysterious illness would not allow me to travel, robbing me of my income source. This meant I was poorly prepared to afford the slew of tests. The range of medicines that were prescribed time after time also extended their hands in my purse.

After an eternity, the tests were finally done. With the tests ruling out the possibility of other diseases, the doctor finally pointed to what was wrong with me. To my surprise, I was informed nothing was wrong with me. The doctor informed me all the tests were negative. I didn’t have colon cancer or celiac disease. My blood work was perfect. This was not the only news I wanted to hear though. Sure enough, a part of me was happy that I was not going to die. But a bigger part of me wanted to know why I had pain, diarrhea and excessive bloating. The doctor then attached a name to my apparent “nothingness.” He called it irritable bowel syndrome. This was the first time I heard of it. My doctor informed me that it was not curable but urged worry was unnecessary seeing it was not a real disease but a series of recurring symptoms. This however bore little comfort to me. From my perspective, something was wrong. I thought this was not just a series of symptoms. The spasms which caused me the greatest pain should not have been passed off as mere symptoms. The near-endless trips to the hospital were a real thing to me. So real, I had to give up traveling and exploring. I knew how much this illness had done to change my life. I was in desperate need of help. I could no longer live with the pain. The diarrhea was weakening. I hated the uncomfortable sensation of bloating. I hated the prospect of giving up traveling and food. It took another doctor to convince me that I was given a correct diagnosis.

Realizing that my life was changed forever was one of my lowest points. I was paralyzed with helplessness. Knowing the experts would only go as far as containing the symptoms came with a devastating feeling. I knew I had to give up traveling and exploring. I knew that food was forever to be had with caution. Worse still, I knew the pain had come to stay. I knew that I had to become dependent on a constant supply of medicines to help control my symptoms. A new and permanent change to control. My foods were replaced with prescribed meds. My feet, which found comfort in traveling, were now tamed, bound to my town. A season battling depression would naturally follow.

I was never really able to find a combination of medicines that suited me. I had to learn to live with the poor relief most of the time. I accepted that the side effects came to stay. There were days I battled pain and days I didn’t. This became my new norm. I found an online job to help sustain myself. I didn’t want a job that would make me leave the house often because of my diarrhea. In time, I gave birth to a daughter. During the delivery, the nurses were amazed by my almost nil response to the contractions. The truth was I had gone through so many painful spasms that my contractions didn’t seem to be any different.

Irritable bowel syndrome robbed me of my life. I know that no cure exists. The titles from online searches are sure to echo that fact. Most bear the theme “How To Live With Irritable Bowel Syndrome.” This I try to do with ill success.

Emily's Hope

As a child, I shared a special and peculiar relationship with my dad. Like most kids, I remember having an impatient urge to be reunited with him after his work hours. Unlike most kids, however, I didn’t find much delight in making friends. From my perspective, a friend was already found in my father. Weekends and holidays were particularly special to me. In them, I was granted a season to spend uninterrupted time with him. I delighted in activities that meant spending time with him were always more than welcome. A bicycle ride in the park, a trip to the movie theaters, or roller coasters — all seemed to give me complete delight.

My life took a turn for the worst, however, when my father was attacked with a very severe case of sepsis infection. In a short season, everything that could possibly go wrong went wrong. The infection had a tight grip on him. Its hold unforgiving and vicious. He was fading away slowly because of the ferocious disease. His temperature fell and his breathing pace reduced. His condition suggested a dark season was approaching. I knew what was coming but refused to accept that outcome. I was paralyzed with fear at the prospect of losing him. My best efforts to seek better help than what was given him yielded no results. My fear was realized. After months fighting the infection, he succumbed to its grip and died. This was a heavy blow to me. My world was turned upside down. Nothing seemed to make sense anymore. I shuddered at the thought of facing life without him. I was in a constant state of stress and unease, burdened by the new reality. The realization took a heavy toll on me.

I never really managed to get a good footing afterward. For a long time, I contended with a deep depression. Nothing seemed to make sense to me anymore. I found no reason to live. My life took a sluggish pace and headed in a purposeless direction. My best achievements were not celebrated. Thoughts of how pleased my father would have been turned the good experiences bitter. I was in a constant state of stress because I refused to accept the reality I was in. My body too seemed to reflect my mental state. My bearing became weak and frail. At a snail’s pace, I moved forward. I didn’t want to, but I had to do it.

I suppose it was my weakened mental state that contributed to the illnesses I started developing. One after another, disease after disease found an easy prey in me. I could not ward off simple infections on my own. I became dependent on medicines to survive. In the midst of these assaults, I could not have guessed that another more serious illness had marked me as its next prey, wishing to take me for a walk down the same path traced by my father. This was realized when a mild case of sepsis soon ensued. I feared meeting the same fate as my father one time; then I reasoned life was a fate worse than death the next instant. Ultimately, the urge to move on prevailed.

With a little help, I managed to ward off the invader. A concoction of antibiotics prescribed by my doctors were to thank. By then, I had taken so many medicines that I could easily have considered them a part of my diet. After the close call with the sepsis infection, I resolved to get my life back on track. Fate had other plans for me, however. Destiny saw it fit to send two more diseases at me. My experience being a weak and sickly teen was not yet ended.

The first illness made my abdomen home to a series of very painful spasms. Every time they attacked me, I was forced to halt all I was doing. The pain was among the most intense I ever felt. A severe feeling of bloating and distension would always be present each time I experienced my spasms. My toilet pattern changed drastically. There were weeks where I could only have one or two bowel movements. When I did, it was with labored effort. The bloating and distention made my abdomen feel and look pregnant.

From my cousin’s experience, I knew that the latest illness had all the marks of irritable bowel syndrome. I recalled her agonizing pain frequently. What didn’t make sense to me was why that was happening to me. I thought myself too young to be experiencing it. I thought it unfair to be experiencing that much pain. Especially after what I had gone through. I thought fate was cruel for allowing this to happen. Growing up in a somewhat religious family, I was compelled to think I was being punished for some wrongdoing. I thought the episodes were judgments from God.

Of all my symptoms, I feared the pain the most. It felt like a million red-hot needles stabbing my gut simultaneously. I felt I could have lived with my other symptoms if the pain could be taken away. I prayed for my pain to be taken away, but this request was not answered. I thought things couldn't get worse. I could not imagine pain deeper than what I experienced. But I was proved wrong. In a few weeks, my pain scale was to be extended. An intense migraine headache manifested. Then, the pain I felt inside united with an external pain that I felt throughout my body. Every inch of my body ached. Both muscle and joint were not spared. My entire body from the crown of my head to the sole of my foot seemed ablaze with pain. I could hardly breathe or think. The pain that encompassed my body was paralyzing. I was left guessing what would attack me next.

My sleep pattern too was severely disturbed. I was in an unceasing state of fatigue. Yet, a severe feeling of insomnia stopped my urge to sleep. My battered frame could no longer endure the pain. I knew I had to resume my excess use of medicines. Unfortunately, the painkillers missed their mark that time. Their tricks were too feeble against the pain I felt. I tried one recommended painkiller after another. For my constipation, laxatives were employed to ease the movement in my gut. Magnesium salts were the first. On noting no relief, I tried polygel. Luckily, my bowel managed to resume its normal course. But continued use failed to do the trick. Bowel movements became a rare occurrence and were only guaranteed with extremely painful effort and hours on the toilet seat. On most occasions, spending a lot of time in the bathroom yielded no result.

I had reached a breaking point. I wanted to get quick relief. Especially from the pain. I knew it was time to get professional help. Yet, I harbored a troubling fact in my mind. I knew that irritable bowel syndrome and fibromyalgia were both irreversible. My experience had taught me that patients with these two conditions are bound to live with them for a lifetime. But I was moved by the slight hope that I would be given relief of sorts at the hospital. At the hospital, my attending doctor's sympathy for me was noted in his attentive listening. A huge sense of relief came to me after seeing that he cared. He was my last hope. I knew that he understood my pain. I was hopeful he would craft something to help me. A series of questions and tests followed suit. Surprisingly, only a few tests were done to complete his diagnosis.

As expected, the doctor diagnosed me with irritable bowel syndrome and fibromyalgia. He carefully explained to me what both of them were and that there was no cure at that time. A special diet was recommended to prevent or limit the likelihood of an attack. Exercise and plenty of water were recommended. Finally, he wrote me prescriptions to help with the muscle and abdominal pain. A prescription of painkillers, antidepressants, and laxatives was prescribed. Much-needed relief was noted using his treatment program.

In time, however, the medicines stopped doing their trick. No relief from the pain was noted. The constipation and bloating became more pronounced. The only thing I seemed to be getting from the medicines were the side effects. I decided to halt their use. With an unscheduled visit to the hospital, I explained my state to the doctor. New and stronger medicines were recommended. Turning into a cycle, this became a recurring thing. Medication that initially promised relief would fail at their task, and in their place, new ones would be recommended. The painkillers were completely unaware of their task. The laxatives didn’t know when their object was achieved. In place of giving me a normal bowel movement, they were sure to give me diarrhea every time I took them. The relief that was promised, as noted by the icons and inscriptions on the packages, was not noted by me. Only the warning of the side effects was realized.

Knowing I would be recommended another painkiller or laxative or even stronger doses of the failing meds, I made no trip to the hospital. In desperation, I doubled my effort to find help online. As at first, I had to search through wildly different approaches. There was no way of discriminating between falsehood and fact. My eyes sought to see comments promising any symptom relief. Some claimed to have healed themselves using a week's course of raw blended cabbages and onions. Desperate for relief, I took heed to the absurd suggestion and tried the cocktail for myself. One severe episode later, I learned not to take everything I read online as fact. Undaunted, I realized any claim of symptom relief was supposed to be confirmed by another set of people to give weight to the accuracy of the claim.

With my sharpened approach, I stumbled upon articles of a few users trying out rifaximin, an antibiotic. On further research, I learned that most found longer lasting relief of their symptoms. Some even claimed to have completely reversed both irritable bowel syndrome and fibromyalgia using a course of rifaximin. In my next visit, the doctor agreed to write me a prescription of rifaximin. He also recommended that I take cognitive behavioral therapy to help with my mental state. After a two-week treatment, the results were more marked. It seemed to have an influence on the fibromyalgia too. I felt alive after the burden was carried off my shoulders. My ability to function returned. I could plan my day based on necessity and not what the symptoms demanded. When I noted a relapse of symptoms, I took another course of this antibiotic.

I have learned to have a positive view of life. With the promise held by these treatments, I'm hopeful that I will be able to build my life to the full stature my father would have wanted.

A Lesson From Jane and Emily

Jane's and Emily's stories introduce us to the world of irritable bowel syndrome (IBS) and other disorders previously labeled as functional disorders—a world whose presence remains largely unknown to the average person. Their stories bring to view the two ends of a hope spectrum for IBS victims. On one end lie people walking along the path traced by Jane, who, plagued by this vicious condition, sinks into hopeless despair. On the opposite end lie those whose stance echoes Emily's approach. To these, a way out is given. Their reward is mastery over symptoms that cause many a poor quality of life. The sad reality, however, is that most people fighting IBS and other chronic conditions are as hopeless as Jane. The fear of pain and discomfort makes them sink into uncontrollable panic. Their lives, to a very large degree, are shaped by the dictates of these chronic conditions. The labeling of these chronic conditions as "incurable" by professionals—who are their last hope—spells inescapable doom for them (Drossman, 2016).

Those following the path marked by Emily's footsteps are encouraged to dig deeper into the nature of the conditions when their grips press tighter. They spare time to research how the supposedly "incurable" disease works. The few who take this path have a better quality of life even while living with IBS (Ford et al., 2020).

Jane's despair should not be taken for weakness, however. Few conditions are marked with pain as severe as that experienced by Jane. There are few conditions that come with extreme, chronic, and recurring diarrhea and bloating prepackaged. The torment caused by IBS is enough to bring the strongest and proudest among us to a complete halt. While an attempt will be made to put into perspective the reduced quality of life faced by those unfortunate enough to be diagnosed with these conditions, a true measure of their impact can only be known by those plagued by them. Emily's motive is entirely driven by a complete fear of the torment brought about by her symptoms. While Jane sinks, Emily is emboldened to find a way out. While the paths taken by each differ, both Jane and Emily agree that the symptoms of IBS are unbearable. All sense the paralyzing effects brought about by these chronic conditions (Lovell & Ford, 2012).

Jane's fear is also brought about by her failure to comprehend how the condition works. Her inability to completely control when an episode manifests or how strong it will be contributes to hopelessness. Her uncertainty breeds fear. Her negligence to understand how IBS works is her undoing. Emily's hope stems from the knowledge of the disease. She has reaped the reward of her effort. Jane's negligence may not necessarily be a lack of zeal to understand the nature of chronic conditions but should be blamed on the complexity of the concepts behind the workings of chronic conditions and the terminology used. Her career choice and passions are never in line with human pathophysiology. Consequently, all her trust is put in healthcare professionals trained to decipher these conditions on her behalf. Folks like Emily have interests that align with physiology. The occurrence of chronic conditions in them finds them better equipped to control their symptoms. This text aims to provide even the Janes an inner workings of chronic conditions.

While Emily's is an encouraging story, it falls short of perfection. A perfect story would be one where a complete and permanent reversal of symptoms from these "incurable" diseases is noted. A perfect story must end with a cure. The following chapters will make an attempt at telling that perfect story.

1. What is Irritable Bowel Syndrome?

Irritable bowel syndrome is a disorder of altered bowel motility (movement) and pain processing manifesting itself as chronic and recurring diarrhea, constipation, or a mix of diarrhea and constipation, all coupled with pain. The Rome Foundation, whose task includes building a working framework of unexplained gut disorders, defines IBS as the presence of abdominal pain coinciding with changes in bowel motility patterns (diarrhea or constipation) and stool form (Mearin et al., 2016).

These changes in bowel motility patterns come with a sensation of bloating—an unpleasant heightened sensation of the gut environment which is very disturbing to the victim (Chey et al., 2015).

1.1 Prevalence

As with all diseases, an accurate estimate of the fraction of people affected by this condition is nearly impossible. Data suggest that as much as 20 percent of the world is affected by IBS. One in five people is estimated to be living with IBS. In reality, this number may be higher. Its non-fatal status, the unwillingness of most victims—especially teens—to open up when plagued, and even the complexities diagnosing all place this number on the lower estimate. Understandably, fatal conditions of the gut like colon cancer steal the spotlight, with estimates of their true prevalence being more accurate. The fraction of IBS-related cases among gastrointestinal-related ailments at hospitals strongly suggests that the actual number of people living with IBS is probably higher than estimates show (Lovell & Ford, 2012).

Differences in lifestyles, diet, or medical approaches mean that wild differences in prevalence between countries exist. In some countries, only 1 percent of the population may be living with this condition, while in others, this number may be as high as 45 percent. Despite these differences, Western countries tend to have a higher fraction of their population living with IBS (Canavan et al., 2014). It has been noted that the methods used to diagnose IBS are to blame for the variations in the estimates of IBS prevalence. Because of differences in methods of diagnosis, any efforts trying to quantify its prevalence only give average estimates. Some studies use the Rome III criteria while others use Rome IV. The Rome criteria include diagnostic approaches used to ascertain the presence of gut disorders. The Rome IV criteria are an update to Rome III based on ever-increasing knowledge in the workings of gut disorders (Drossman & Hasler, 2016).

How the information is acquired from the patient further serves as a cause for variation in estimates. In some studies, patient-to-doctor interaction is done face-to-face, promising to give a more accurate diagnosis, whereas in others, online questionnaires are used. This increases the likelihood of wrong diagnosis (Oka et al., 2020).

There are up to three times more women living with IBS than men. This serves as a strong suggestion for the role of hormones in IBS. Evidence reflects a marked predominance of IBS among teens and young adults. IBS normally starts in the teen years, with the older population being less affected (Sperber et al., 2017).

IBS is the most common disorder of the gut. Its prevalence is higher than colon cancer and inflammatory bowel diseases like celiac or Crohn's disease. Gut-related ailments account for 1 in 20 patients seen by primary care physicians, and IBS dominates this list of gut-related conditions. Gastroenterologists—physicians specialized in gut-related conditions—have most of their attention dedicated to IBS than any other condition. Up to 50 percent of all patients referred to a gastroenterologist will have IBS (Longstreth et al., 2006).

Data provided by the World Gastroenterology Organization estimates that about 40 percent of IBS patients have mild symptoms, 35 percent have moderate symptoms, with the remaining quarter suffering from severe symptoms. However, there is no consensus agreement on what estimate should be termed mild, moderate, or severe. Different severity scales are used. This is a strong indication for the variation of symptom severity. Patients, including doctors, differ in their definition of mild, moderate, and severe. What may be a moderate pain sensation in two different subjects may be perceived differently by both. One may correctly view the severity of their symptoms as mild while the other may wrongly view their symptom as severe (Gorard, 2004).

Only up to 50 percent of people living with IBS get professional treatment from healthcare institutions. A percentage of these patients will drop out of treatment, blaming unsatisfactory results as the cause.

2. Symptoms

IBS is a multi-symptom disease. These include pain, diarrhea, constipation, bloating, anxiety, and depression among others. Normally, a series of medicines are prescribed to attack the multiple fronts of the ailment.

2.1 Pain

Pain is never a welcome feeling, yet it serves an important function: alerting an individual to the possibility of harm. In many cases, pain is the sensation that precedes the fight-or-flight response. Packaged in two flavors, pain can be either acute or chronic. Acute pain lasts a short time. Chronic pain, on the other hand, is recurring and long-lasting. It is the latter that stings IBS victims (Mayer & Tillisch, 2011).

IBS patients have faulty processing and exaggerated response to pain. Marked differences occur between the processing of pain seen in the average person and the persistent and recurring pain observed in IBS patients. Acute pain is caused by a perceivable insult such as excessive mechanical pressure, heat, or cold. A reason is found for the sensation of acute pain. However, the chronic pain sensed by IBS patients happens without any apparent cause. From the patient’s perspective, no explanation can be given to account for its presence or onset. The pain felt by IBS patients is apparently unprovoked, stemming out of nowhere and unnecessary, serving no biological significance. It neither warns the victim of impending doom nor educates them on what constitutes danger. Its effect is noted only in the unpleasant sensation that punishes the victims (Aziz & Thompson, 1998).

In acute pain, a certain threshold of stimulus must be reached for pain to be perceived. A light press is normally perceived as touch, while a more severe one will induce pain. IBS patients, however, have a reduced threshold for the sensation of pain. Stimuli perceived as normal by the average person will be painful for IBS patients. This state is fittingly termed hypersensitivity (Drossman & Hasler, 2016). Furthermore, in acute pain, increasing stimulus intensity results in proportional increases in pain perception; a small pressure causes small pain, a large pressure causes larger pain. In IBS patients, pain processing is exaggerated and disproportional, magnifying small stimuli to large pain sensations. This faulty magnification is truly tormenting (Mayer & Tillisch, 2011).

Overall, whether with mild, moderate, or severe symptoms, IBS victims experience magnitudes of pain far greater than the average person. It causes severe anguish of mind. Among IBS patients, pain is the most detested symptom and the reason most victims seek medical help. Pain contributes most to reducing quality of life and is most difficult to treat. Antidepressants may be recommended for pain because IBS patients have altered nervous system functioning leading to faulty pain processing. Antispasmodics aimed at reducing abdominal spasms can help, but the many pathways involved in pain processing make targeting all of them nearly impossible. Consequently, victims often hop from medicine to medicine seeking relief (Camilleri et al., 2017).

Disease and suffering manifest in pain, and in the unpleasant sting of pain is the motive to reverse or withdraw the insult responsible for disease. Unfortunately, doing this is extremely complicated for IBS victims.

2.2 Diarrhea

Diarrhea differentiates IBS-D from other subtypes. An increased frequency of bowel movements accompanies diarrhea. While a healthy gut has well-timed and normal contractions of intestinal muscles, IBS-D patients have overactive contractions, resulting in speedy evacuation—sometimes up to 10 bowel movements per day (Mearin et al., 2016).

Much like cholera infection, fluid absorption from intestines into the bloodstream is severely reduced, causing soft watery stool. In severe cases, stool consistency nearly matches water. Increased secretion of fluid from blood into the intestinal lumen further reduces stool bulk. IBS-D patients are also noted to pass mucus in stool. Like Jane, IBS-D patients are often compelled to stay home where toilet access is guaranteed, fearing an attack without a bathroom nearby (Camilleri et al., 2017).

Medicines like loperamide try to shift the gut contractions back to normal, while others like bile acid sequestrants increase water absorption for stool bulking.

2.3 Constipation

Constipation is the defining feature of constipation-predominant irritable bowel syndrome (IBS-C). In this subtype, the rhythm of gut muscles is severely stalled when the patient is constipated. The depressed contractions do not provide enough force to propel the gut contents forward. Worse still, water secretion into the intestines, which has an overall lubricating effect, is severely hampered. Dry and lumpy stools result from this defect. The lubricating effect is also affected by poorly timed absorption of fluids from the intestinal contents. An increased transit time can be noted as the intestinal contents make their way down the gut at a tortuous pace. Overall, the number of bowel movements is thus reduced. The dry and lumpy stools mean that defecation is achieved only with labored effort. On some occasions, friction from the dry stool causes bleeding (Ford et al., 2020).

Laxatives may be employed in countering constipation. Among the most well-known are magnesium salts, which are available over the counter and do not require a doctor's prescription. The ease of access to these prescription-free medicines like magnesium salts means that most patients try these first-line treatments long before consulting professional help. These laxatives work as stool softeners. By drawing fluids into the intestinal cavity, they provide a lubricating effect. Others, like tegaserod, work by exciting the stalled muscle contractions (Chey et al., 2015).

The majority of constipated patients will note a substantial reduction in pain and bloating after a successful evacuation of the bowel.

Constipation, and consequently a clogged gut, can cause major discomfort. In some instances, the discomfort that comes with the labored effort the patient has to go through serves as a source of worry, perhaps even a loss of spontaneity and freedom. A nice and unstrained bowel movement on a regular basis is indeed a fine thing to be desired (Longstreth et al., 2006).

2.4The Worst of Both Worlds: Mixed Subtype (IBS-M)

Change does not always bring good results. Patients living with the mixed IBS subtype are particularly aware of this fact. In one episode, a patient may have a constipation-predominated bowel pattern. After a period of normal bowel movements, a complete shift in bowel pattern may happen, marked by a diarrhea-predominated bowel pattern. In some cases, both bowel patterns may happen in the same bowel movement. A defecation episode starting with a strained effort, and consequently making the patient wish their straining be relieved, may be displaced with diarrhea.

Correcting bowel movements in either diarrhea- or constipation-predominated bowel patterns may yield unsatisfactory results in most patients. This means that the mixed predominant IBS subtype is particularly difficult to treat. The constant shifts in bowel patterns mean that homing in on an already difficult trait to treat is nearly impossible. Pharmaceutical companies invest considerable time and money researching the best alternatives to treat the specific subtypes. Yet more work still needs to be done before pharmaceuticals can be relied upon to address the flaws in the specific subtypes. Thus, few, if any, medicines are available to treat the mixed IBS subtype. Careful use of the medicines suited for the other subtypes is employed in treating it, but the results are more unsatisfactory than in the other two subtypes. Physicians are therefore frustrated with treating the mixed subtype of IBS (Mearin et al., 2016).

2.5 Bloating and Distension

In everyday language, bloating is a term used to describe an increase in the size of the abdomen. The feeling of indigestion that accompanies an excessively filled stomach is also noted as bloating by others. The feeling of pressure in the abdomen and the increase in its size caused by trapped gas are two very different terms, however. As noted in the literature, when rightly used, bloating represents the uncomfortable feeling of pressure caused by the contents of the gut, whereas the visible increase in the girth (size) of the abdomen is called distension (Spiller & Garsed, 2009).

It has been shown that bloating can occur in the absence of an increase in the size of the abdominal girth (distension). Constipated patients, whose guts are most likely clogged with immobile gut contents, build up gas pressure, which manifests as an increase in the size of the abdomen. A successful bowel movement reverses the condition. The fact that bloating can occur in the absence of distension is shown in diarrhea-plagued patients whose hyperactive gut guarantees a clog-free gut. This means that pressure buildup will be absent. Bloating thus relates to the heightened perception of the gut environment. In the average individual, sensing the activities taking place in the gut is not done under conscious control. Only a small portion of the gut, i.e., the upper portion of the small intestine and the anal muscles, is subject to conscious sensing. Flaws in the wiring of the nervous circuitry give the IBS patient an ability to sparsely sense the gut environment. Bloating can be accounted for when the increased perception that is inherent to IBS is factored in. Thus, light pressure applications from the gut contents, which would normally go unnoticed in the average person, would be perceived in IBS patients. Bloating can then be viewed as a subset of the so-called visceral (intestinal) hypersensitivity, which is a chief defining feature of IBS (Aziz et al., 2016).

Explaining why bloating occurs, especially in the absence of visible distension, was a puzzling thing for scientists. In time, however, it was shown that uncoordinated motion, which is the other main defining feature of IBS, of intestinal muscles can trap pockets of gas. A section of intestine muscles ahead of gas in motion may not relax to ensure the passage of the gas, creating trapped gas. These pockets of trapped gas serve as sources of increased pressure. This, as well as the presence of heightened perception, creates extreme discomfort. Naturally, fluids and ordinary gut contents are guaranteed to cause this super sense termed bloating.

It is bloating, after pain, which causes the most discomfort in IBS patients (Simrén et al., 2005).

2.6 Other Symptoms

According to the Rome Foundation, altered gut motility and sensing are the defining features of irritable bowel syndrome. However, other symptoms are bound to occur, though most times infrequently and less severely. However, the increased intensity from the main defining symptoms casts its huge shadow on these other symptoms. Intestinal and extra-intestinal symptoms including severe headaches, a constant urge to urinate, painful sensation in women during sexual intercourse, heartburn, and fatigue are symptoms that will normally be seen in these patients (Drossman et al., 2016).

Alarming Symptoms

Irritable bowel syndrome shares many symptoms with other disorders of the gut. These include Crohn’s disease and celiac disease. Colon cancer, a fatal and feared condition, will also mimic IBS. It is because most of these conditions attack the same machinery in the gut that similarities in their symptom profiles can be noted. Luckily, enough differences in pathophysiology between them exist, allowing us to tell the differences between these somewhat similar ailments. Irritable bowel syndrome is not a fatal condition; thus, its chronicity is not alarming. The patient lives, though with a reduced quality of life, to see another day. The symptoms noted above are therefore considered normal from the non-fatal point of view. The onset of new symptoms may communicate the onset of potentially life-threatening conditions and thus should be known by most. These so-called alarming symptoms differentiate IBS from the other similar symptomatic ailments. However, the chronic nature of the condition may blind some patients into thinking their new symptoms are mere manifestations of this foe. However, new symptoms are red flags, serving as warnings for more serious and consequently fatal conditions. Patients are compelled to visit a physician at the onset of red flag symptoms, which include (Drossman & Hasler, 2016):

2.6.1 Passing blood in stool

Passing blood in stool may be a feature occasionally seen in constipated patients. However, it may also be a sign of colon cancer, especially in older patients (Longstreth et al., 2006).

2.6.2 Weight loss

Weight loss is another symptom not considered native to IBS. Intentional weight loss aided by changes to the diet or undertaking extreme exercise is not included here. It is the unintentional weight loss that is considered alarming, communicating the approach of fatal conditions like cancer (Mearin et al., 2016).

3. The Woes Of The Victim

How bad the quality of life will be for an IBS patient is a parameter chiefly determined by the severity of the symptoms. As earlier alluded to, these range from mild to moderate to severe. It is the patient with severe symptoms who will obviously have the worst quality of life. While data suggest that only about 30 percent of patients will have either moderate or severe symptoms, experience shows the majority of patients describe their symptoms as either moderate or severe. In this section, the quality of life for patients with moderate or severe symptoms is described as accurately as possible to give the reader, especially those living without the condition, an estimate of the reduced quality of life faced by IBS patients (Creed & Whorwell, 1997).

3,1 Contending with physical symptoms

A mild case of diarrhea is enough to severely affect the average person. They may complain of the stomach aches that come with diarrhea. This mild pain may render them inactive. Worse still, the loss of sugars and electrolytes in the stool means that a feeling of weakness is always sure to accompany diarrhea episodes. Most then would blame their inactivity on low reserves in their energy tank. In the constant urgency to visit the toilet, the schedule-changing effect of a diarrhea episode can be noted. Unpredictable bowel movements become the basis on which a day's activity may be planned. On the other end of the bowel movement spectrum, the discomfort that marks a failing bowel movement may put a lot of unease on the patient. Passing stools, when successful, is normally done with extreme straining and even pain. A reduced number of bowel movements means the victim contends with an uncomfortable feeling of a loaded and clogged gut. Meanwhile, a bloated abdomen gives the feeling of an irritating, unbearable, and chronic discomfort. Bloating makes motion and other activities feel uncomfortable. All actions like walking, lifting, and turning which may induce pressure in the abdomen become undesirable in a bloated individual. Bloating is realized in a spell of inactivity in most patients. Finally, pain is the most detested symptom of disease. Punishing and tormenting in its nature, all seek to hide from its stinging grip. The unpleasing sensation inflicted on the senses really is the currency in which suffering is measured (Drossman, 2016).

These symptoms are characteristic of four standalone diseases. Functional bloating is marked with an unexplainable, chronic, and recurring sensation of bloating. Its impact in reducing the patient's quality of life is difficult to hide. Functional constipation patients have chronic constipation that is unaccounted for or whose genesis is not completely understood. Poor relief from laxatives and other pharmaceuticals that excite the gut means that the patient lives with a reduced quality of life. In functional diarrhea, a constant urgency to use the bathroom disturbs the victim's schedules and has a weakening effect on their system. In another incompletely understood condition of the gut termed functional abdominal pain, recurring abdominal pain humbles its victims with an unpleasant sensation. While a spell from a single symptom described above inflicts severe discomfort and reduces the quality of life of the victims it hits, an IBS patient's dilemma is realized in facing all these symptoms simultaneously, in a recurring pattern, and with increased intensity. A body battered by these numbing symptoms faces a very reduced quality of life. In studies that echoed this fact, it was found that IBS patients face worse quality of life than patients living with fatal conditions like heart disease and end-stage renal disease. Irritable bowel syndrome resides on many spectrums consisting of functional pain, bloating, and diarrhea or constipation. Irritable bowel syndrome is a disease made up of diseases. Its effect on the victim is understandably humbling (Mearin et al., 2016; Drossman, 2016).

Extraintestinal symptoms too can be perceived in the victims. Among the notable ones are migraines, which even when occurring alone are detested (Ford et al., 2009).

3.1 Symptoms beyond the physical

The punishing effects of irritable bowel syndrome are never only physical in their nature. In the victim’s mental and emotional torment, the extending influence of negatives inflicted by this foe can be noted. Fear is ever in the victim’s mind who, laying in wait for the next attacks of pain, is almost always powerless to stop them. None can claim being accustomed to the stings of pain. IBS victims are mocked by its sure approach. In helpless anticipation, they await being held prey to its hold. They are tormented by the portion of pain and discomfort that is sure to be theirs. Unfortunately, the peace that comes with a successful reversal of pain is almost never theirs to share. Pain-free episodes are to most periods of pondering as to the next attack. Getting relief from the physical burden hardly ever results in the freedom and loosening of the mind. What's worse, a formula to predict when this pain episode will strike, how strong its hold will be, or how long it will last is never in their grasp. The unpredictable nature of this condition doubles their anguish. A feeling of helplessness like that noted in Jane encompasses the victims. They know their arsenal is too weak to wage war against a strong foe (Drossman, 2016).

As noted in Jane's story, still more fear is theirs to bear. IBS patients, specifically those with the diarrhea or the mixed subtype, are certainly afraid of wandering far from a readily available bathroom. Most have faced close calls where they almost didn't make it to the bathroom on time. Forced to imagine the embarrassment that would be theirs in the event that they failed to control their toilet urgency, the victims are forced to meticulously plan simple trips. Locations without public bathrooms may be scraped off their plan. Routes are decided based on the availability of bathrooms. Unfortunately, a few have been forced to suffer shame that would obviously come with not making it to the bathroom in time (Mearin et al., 2016).

Unfortunately, the portion of their fear pie does not end here. The chronic nature of this condition tempts some to fear that an undiagnosed and fatal condition may be lurking. Any assurance from primary care physicians offers little comfort to these select few. From childhood, many are trained to fear illnesses whose tests give negative diagnosis results. Dangerous, complex, chronic, and eventually fatal conditions work in mechanisms that elude the professionals in white coats. It is in the patient's knowledge that a doctor cannot reverse all disease. Dangerous and fatal conditions like cancer may sometimes outmaneuver the doctors' expertise. In the patient's estimate, and rightly so, fatal conditions are able to resist all efforts to understand or control them. Prescribed medicines may do little to alleviate the symptoms. With IBS possessing characteristics of fatal illnesses, the victims' mental state may be greatly agitated in a select few (Longstreth et al., 2006; Drossman, 2016).

3.1.1 A not so impressive result from meds

In the western approach of medicine, understanding an underlying mechanism behind the workings of body parts or processes in scientific detail is ever the motive. With this archived, the broken part or process may be replaced using the aid of manifactured medicines or parts. Years worth of research and experience mean that our approach has come a long way having gone through multiple evolutions. Our attempts are incomplete however. Neither can they be fully realised. We cannot match the bodies capacity to perform the tasks its designed to perform. Any attempt we make to replace the suited parts or processes always come with negative consequences. These are the side effects. Every manifactured pharmaceutical comes with a whole slew of side effects with some being mild, moderate or severe. The magnitude of positives or negatives, to a large extent, determine whether a particular pharmaceutical will be taken continously or halted permanately (Mills et al., 2019).

The medicines designed to reverse irritable bowel syndrome come with their share of side effects. The gut's control of motility or its ability to sense the digestive enviroment and decide on the action to take based on the state are extremely intricate and complex processes. Assuming to artificially perform these tasks with the use of synthetic or even similar molecules is a near impossible if not impossible task (Camilleri, 2018). It's in the gut's knowledge to know when and how much of a particular molecule may be needed to perform a certain task. Motility is governed by a whole slew of molecules whose actions have not been completely deciphered. Mimicking their actions may lead to a stalled or hyper state of motility. This is exactly what is sometimes or often noted in pharmaceuticals designed to correct flaws in bowel movement patterns (Lacy & Patel, 2017). Some classes of anti-diarrheals which sometimes work by reducing the excitability of gut muscles may miss their desired purpose and slow it too severely. They may not be smart enough to account for all possible variables where motility is concerned. When this happens, constipation, an exact opposite, can be perceived in the victims. The same can happen with those that work by improving the absorption of fluids in the intestines (Ford et al., 2020).

Most often, extra-intestinal side effects may be noted in the victim; these include blurred vision, dry mouths, headaches, nausea and vomiting, and fatigue. It’s an attack from these side effects that contribute to reducing the quality of life of the victim (Chey et al., 2015).

Pharmaceutical giants boast of their products’ success at alleviating IBS symptoms. Studies showcasing how an active ingredient may be more effective in controlling a particular symptom, i.e., pain, using a particular pathway may be advertised to add weight to their claim. With impressive numbers proved by actual experiments, many medicines see huge sales figures. Yet, these one-sided studies don’t accurately depict the level of satisfaction with medication in the IBS community. A single viewpoint whose purpose may be to see a surge in profits is the one presented in studies. However, the reality, as noted in the IBS community, is more bleak. Jane’s and Emily’s accounts are more accurate depictions of this reality. IBS symptoms like pain are multifaceted in their nature. A complete understanding of all the pathways involved in the onset of chronic pain is not yet fully understood. It’s a hard task to target most of these pathways simultaneously. Targeting the pathways yet to be discovered is almost impossible (Mearow et al., 2018). Consequently, many medicines fail to target most of these pathways simultaneously. Highlighting this fact on the product label may not be a smart thing if profit takes a big part of the motive to formulate the product. Such information is therefore purposely withheld from the label. While a particular ingredient of study may be very effective at targeting a particular pathway of pain, its negligence of the other routes through which pain may occur means most meds will have poor symptom relief. This is more accurately reflected in the poor patient satisfaction with most medicines (Irvine et al., 2016). As noted in Jane’s and Emily’s story, patients may be forced to halt taking medicines prescribed without the doctor’s consent. In the patient’s hop from one medicine to another, we can read a more accurate message of the patient's satisfaction with medicines. This in itself speaks against the claims made by many pharmaceutical companies.

3.1.2 Tormented in silence

IBS victims face the impossible task of communicating their symptoms, especially abdominal pain, to an audience ill-equipped to understand. Unlike most illnesses, IBS does not publish its symptoms. No physical deformity is observed to announce its presence. No general weakness or weight loss speaks on behalf of the victim. The lack of physical deformity makes all appear fine. Consequently, the victim's description of their state is never reflected in their appearance. This facade makes most fall into the wrong path of mistaking the victim's complaints for extreme exaggeration aimed at attracting attention or even pretexts for which to not participate in activities that require their input. This serves as a huge blow to the victim whose state is expectant of the slightest note of sympathy. Thus, the impossibility to communicate a disease lacking visible symptoms makes most IBS victims suffer in silence. On their physical burden is laid a huge emotional weight. Unfortunately, the audience of people who fail to understand the victim's woes may include close family, i.e., sisters or mothers. From Jane's account, it was observed that this list includes the trained practitioners whose knowledge gives them a real estimate of the torment experienced in the IBS community (Drossman, 2016).

Another reason the victims may suffer in silence may be the unwillingness of the average person to discuss their bowel movement patterns. Informing someone of a struggle with explosive diarrhea is an odd thing to the average person. So too would making the next person learn of your struggle with constipation. This unwillingness by most victims serves, in a large part, as the reason why most of the population are uneducated to the true nature and real prevalence of irritable bowel syndrome. Data shows that the majority of patients living with IBS are teenagers. Common to most in this age group is a very severe awareness of how the world views them. Most teenagers share a severe urge to build a perfect and likeable image. Understandably, talks involving bowel habits, particularly explosive diarrhea or a clogged gut wouldn't aid in presenting this positive image.

Topics involving such themes would therefore be avoided. Unfortunately, this perfect ailment-free image is built on a painful lie which has negative consequences for the victim (Mearow et al., 2018).

3.1.3 A failure to function

IBS comes with an inability to function. This is seen in the levels of absenteeism commonly seen in IBS patients. When faced with severe bouts of pain or an extreme urgency to visit the bathroom, work duty would occupy a secondary importance. However, a failure to concentrate on the task may force the hopeless victim to contend with prospects of a possible dismissal from the workplace. IBS is unforgiving in its impact, threatening to attack all aspects of the victim's life. The victim, who against their will, resolves to make it to the workplace, finds himself/herself failing to match the work output of the average worker. As noted previously, the victim's inability to match their usual productivity or that of their fellow workmates may be perceived as being lazy or unwilling to participate. Thus most victims face threats of dismissal from superiors who fail to comprehend their suffering. Some may be dismissed on this account while others may drop out, blaming their inability to keep up. This is a sad reality of the gulf that still exists between IBS patients and the general public (Lacy & Patel, 2017).

3.1.4 Poor sleep pattern

IBS victims experience a very poor sleep pattern. The chief culprit to blame for this is pain. A tight grip of pain is enough to ensure that the tormented body fails to loosen up and sink into a deep sleep. Sadly, this occurs with bloating further complicating their situation. Victims with diarrhea or the mixed subtype may be forced to wake occasionally to empty their overactive bowels (Chey et al., 2015).

3.1.5 Food

Food and eating are a major part of every person's life. Going beyond the sensation of satiety, the act of eating is employed for pleasure. In our different selections of food is reflected the mood we feel or wish to feel. Different selections of food can be made depending on the time at our disposal. Variety in food is also used to evoke certain memories and emotions. A hearty dish tastes like home for some providing fullness as well as joy. Taste is amongst the prime senses that defines and completes us. Food, in a way, represents freedom itself. While not all may be as passionate as Jane towards food, all agree that eating goes beyond attaining satiety. Unfortunately, the IBS patient feeds for satiety. Selecting food based on choice, mood or the pleasure the individual wishes to feel is restricted. Taking certain foods comes with a known, detested and painful penalty. With the loss to choose foods at will comes a severe sense of loss of freedom. The freedom to express. IBS victims are advised to stick to the so-called low FODMAP diet. A term which is short for FO (fermentable oligosaccharides), D (Disaccharides), M (Monosaccharides), And Polyols (APs). These are simply sugars that are not easily absorbed. When fermented by the bacteria in the gut, IBS symptoms are evoked. Unfortunately, many foods (including fruits), legumes and vegetables are made up of these carbohydrates, therefore, the list of foods to exclude is extensive robbing the victim of their freedom to choose. The caution practiced with the avoidance of many foods translates to viewing most foods as dangerous, masking a penalty. All joy is taken out of eating for the unfortunate victim. IBS patients, particularly those who strictly stick to the rules, will be noted as being very picky or even avoid eating altogether at social gatherings. Following the restricted diet becomes a huge challenge for most victims however. The pleasure that comes with eating anything and freely tempts most patients to suffer the consequences that come with not taking heed to the rules laid by this diet plan. Worse still, even though the low FODMAP diet comes with a slight mastery over the IBS symptoms, its extended use threatens the risk of malnutrition. This complicates the tasks of dieticians who are tasked with crafting a balanced meal plan from a severely limited list of ingredients (Staudacher et al., 2017).

3.1.6 Lifestyle

Our lifestyles constitute the activities that keep us going and thus define us. Who we are is reflected by our hobbies and passions. What we feel or wish to be can be noted in our actions. For some, their passions are transformed into careers, allowing them to make a living off where their hearts dwell. Eventually, these activities become our lifestyles, requiring both our time planning and attention performing them. In good health both these actions can be performed freely. A painter needs time planning and painting his masterpiece. A chef dedicates time formulating recipes and bringing them to life. The attention dedicated to these tasks need not be physically involving. Even tasks requiring use of the mind like designing before painting or writing a recipe before cooking need attention. It's on the basis of good health that these are performed (Kellow & Aziz, 2019).

Thus our lifestyles, to the greatest degree, define us. While each person will have a different lifestyle, a common underlying theme among the different lifestyle choices is the time dedicated to performing and living them. All lifestyles require attention. In good health, this is guaranteed.

If a mild case of diarrhea can change an individual's plans for the day, then a chronic recurring case of diarrhea can change a lifestyle. If an acute episode of pain makes most cancel their scheduled plan, then a chronic episode will surely make most cancel their life plans. Like Jane, many victims are forced to give up on their careers. The onset of IBS serves as a crossroads and major turning points in the lifestyles of most victims. Will power alone is never enough to fight chronic and recurring pain. Neither can hope stand up to discomfort. The victims almost always bend to the painful grip of IBS. With most passions, hobbies and lifestyles depending on continued and steady attention in time and effort, an IBS victim's inability to dedicate this attention to their passions means a sad end to the lifestyles of some.

In life's hardships, passions and hobbies keep us going. In them we may find enough willpower to pace on in a chaotic and sometimes pointless environment. An instrument player, after having a bad day, may lift his instrument to lift his spirits. So too can the painter or poet. In this, our lifestyles, hobbies and passions serve a role of prime importance. Understandably, this is a very huge part of what defines us. Plucking out a person's passion robs them of their identity leaving behind a huge void. The victim may be mocked at the sight of those still able to perform tasks that once previously defined them. It's thus that some may sink into a permanent depression. Irritable bowel syndrome can single handedly hit major points of influence in the individual's life including their diet and lifestyle, all while appearing simple. While IBS does not demand the victim's life, this foe can make living it a real nightmare (Lacy & Patel, 2017).

3.1.7 Numbers don't lie

As noted earlier, describing the impact that a certain disease has using words alone is a difficult task. If experience is the best teacher, then the plague-free victim may not truly comprehend the reduced quality of life faced by those afflicted by disease (Snyder et al., 2018). Yet, ways to estimate this impact have been ingeniously put into perspective by others. One such way is by noting what the victim may be willing to sacrifice in exchange for symptom-free living (Furberg et al., 2011). With the symptom-free person having an attachment to some of the variables the victim is willing to trade for a better life, an average estimate of the impact caused by IBS is brought to their perspective (Whitehead et al., 2002).

Seeking a true estimate of reduced quality of life in IBS patients, a study by Drossman et al. (2009) found that, out of his 1,000-strong test audience, 40 percent were willing to give up sex in exchange for a cure. A staggering 69 percent considered symptom reversal better than the pleasure derived from alcohol consumption (Drossman et al., 2009). In another study, Drossman (2016) found that 25 percent of his audience were willing to risk a 10 percent chance of death if a hypothetical medicine promised a cure. Surprisingly, 5 percent believed that subtracting 15 years from their life span in exchange for a possible cure was a fair trade.

At a quick glance, the wishes of the poor victims noted above may seem odd and could be interpreted as statements spoken hastily without much thought. They may be seen as utterances from individuals too weak to bear what most would endure (Mertz et al., 1995). However, careful reflection reveals a grim reality unknown to most. These claims testify to the intensity of the condition. With IBS producing symptoms difficult for victims to communicate, these statements serve as their best-found collection of words to convey the impact of this foe (Drossman & Hasler, 2016).

Others, like Professor Drossman of the Rome Foundation, have found the right combination of words to nearly capture the true horrors of the disease. In a single paragraph, he accurately describes the physical, emotional, and social impact of IBS on the victim. In an impressive statement, he says:

“A predominant theme was a sense of stigma experienced because of a lack of understanding by family, friends, and physicians of the effects of IBS on the individual, or the legitimacy of the individual emotions and adaptation behaviors experienced. Patients described IBS not only as symptoms (predominantly abdominal pain) but mainly as it affects daily function, thoughts, feelings, and behaviors. Common responses included uncertainty and unpredictability with loss of freedom, spontaneity, and social contacts, as well as feelings of fearfulness” (Drossman et al., 2009, p. 1898).

The statement above is among the best found to depict the physical, mental, and emotional sufferings of the poor victims. Symptoms which at a single instance may affect daily function can, in the compiled sense, impact livelihoods and lifestyles (Mearin et al., 2016). Spontaneity — the freedom and randomness programmed into life — breeds freedom and makes life enjoyable. Its loss, coupled with feelings of uncertainty and fear, is deeply felt by victims.

3.2 A bad situation made worse

The previous section laid open the woes that an IBS patient bears. Yet a description of their burden would be incomplete without mentioning that IBS almost always occurs with other different ailments. Some of these ailments, like reflux disease and functional dyspepsia, reside in the gut, while others, like fibromyalgia, which affects the muscles and joints, are extra-intestinal. Some of these ailments will be discussed here. While these ailments do occur as separate diseases, their common frequency in IBS draws a tempting question: does IBS and its co-occurring conditions share a common pathogenesis? This seems like a probable outcome. Reflux disease and functional dyspepsia are also ailments characterized by altered motility (in the upper stomach for reflux disease and the lower stomach region in functional dyspepsia). However, this question may seem unfounded when we note that fibromyalgia, anxiety, and depression do not reside in the gut and are not characterized by altered motility, thus arguing against any such possibilities. However, treatments such as those involving rifaximin, an antibiotic, or those involving fecal microbiota transplantation, have been shown to attack both IBS and fibromyalgia simultaneously, thus tempting us to ask the previous question. In fact, a shared pathogenesis in these ailments is the case. How this is so will be shown later.

Viewing different diseases as having different origins can be considered a step backward in reversing them. In fact, a better viewpoint would be realizing that most diseases are different points on a single adiarrhea or functional constipation can be viewed as subsets of motility disorders. So too can functional pain be viewed as a single point in pain-related disorders, which include fibromyalgia. As will be shown, most of these ailments are mere subsets of more general diseases. Motility, whether in the upper or lower gut, is achieved using similar principles. So too is the processing of pain in intestinal and extra-intestinal conditions. While these are among general categories of ailment types, at the cellular level, similarities in flaws in processes that regulate motility and those that regulate pain processing can be perceived. So long as different diseases are viewed as having different pathogeneses, a veil in front of our eyes will prevent us from seeing the bigger picture.

A unifying factor in the genesis of disease has also been hinted at on the basis of location. Scientific research, which by nature is always ahead of industry-wide practice, has hinted at the fact that most diseases have a similar origin point—the gut. Diabetes, fibromyalgia, Parkinson's, and even conditions like obesity all stem from flaws in the functioning of the gut (Foster et al., 2017; Mayer et al., 2014). Everywhere science looks, similarities in source, function, or flaw can be perceived. This drives home the message that abstractions, while good for understanding how the world works, veil from us the workings of systems.

Naturally, industry practice is updated based on the findings of research. The time may be ripe for industry practice to be revised yet again. A system-wide restructuring to birth a new foundation is needed. Understanding the genesis of disease using a new pair of eyes is vital to remedy it. These pairs of eyes are the ones employed here to translate the mess one would encounter in answering questions like "Can IBS be remedied?" and if so, "Which approach is best suited for the task amidst a zoo of possible cures and skepticism concerning a possible cure by most?"

Our challenge then is noting what the basic nature of all disease is. This will be the discussion of Chapter 3. In Chapter 4, the basic functional unit of the gut will be studied in detail. It wi

3.2.1 Reflux Disease

Like irritable bowel syndrome, reflux disease is also a disorder characterized by motility (movement) dysfunction. While IBS is marked by altered motility (diarrhea or constipation) in the small and large intestine, reflux disease is characterized by altered motility in the upper gut (esophagus). While both reflux disease and IBS are marked with deep pain, their onset is somewhat different. IBS-related pain is caused by faulty pain processing in the nervous system, whereas the pain noted in reflux disease is caused by a motility flaw (Katzka & Camilleri, 2013). The normal route taken by food, after digestion in the stomach, is the small intestine. Instead, a backflow of the acid-mixed food makes its way along the path it previously traced. Unlike the stomach, whose mucus layer protects it from acid more potent than battery acid, the lining of the esophagus is poorly prepared to face an assault from acidic contents. As is typical with acid attacks, the victim notes this as a deep and burning sensation in the chest area. A filling mouth alerts the individual to regurgitated food. This is normally accompanied by a foul and sour taste. Reflux disease is among the most known ailments of the gut. More people are conversant with its presence and nature than they are of IBS.

At the base of the esophagus, a muscle ensures that the acidic contents of the stomach never force their way upwards. Most think of the stomach as an idle bag used for the storage of food. This is not the case; the stomach is ever in constant churning motions, working to thoroughly mix the food with the acid for digestion. These pressure waves create enough force to push the contents of the stomach back into the esophagus. To prevent this, a sphincter muscle exerts a force strong enough to hold its own against the pressure created by stomach motions. In doing this, the fragile esophagus is protected from stomach acid. Eventually, as a response to swallowing, the sphincter muscle opens allowing the swallowed food entrance into the stomach. This opening gives a window for acidic stomach contents to move into the esophagus. Why then doesn't a burning sensation ensue? The answer lies in the fact that the esophagus contains a temporal buffer against the acid. A layer of water coating the esophagus lining stands guard. In the small window that the sphincter muscle is loosened, this protection mechanism is strong enough to offer a limited defense. To aid in its defense, swallowed food contains saliva, which is slightly alkaline. The passage of saliva and food is trailed by a neutralizing effect. This is more than enough defense for a structure not designed to house acids for prolonged periods. The stomach, which produces acids, bathes itself in this potent liquid. To prevent the erosion of its walls, a thick coating of mucus covers its structure (Katzka & Camilleri, 2013).

While reflux disease does occur alone, affecting up to 20% of the population, its high prevalence in IBS patients is difficult to ignore (El-Serag, 2014). The high presence of reflux disease in IBS is suggestive of a common cause between the two ailments. At a quick glance, this possibility seems unlikely when we note that reflux disease also occurs alone on many instances. Science confirming that factors like severe alcohol consumption or smoking are directly linked to the onset of reflux disease seems to argue against this suggestion. Yet, like IBS, the genesis of reflux disease has many routes. Perhaps one of these pathways coincides with the causes of IBS. This is in fact the case, as will be shown in later chapters. The greatest argument in support of a common genesis between the two conditions is the observation that reversing IBS symptoms also reverses reflux disease symptoms (Tack et al., 2017).

3.2.2 Functional Dyspepsia

Functional dyspepsia is another disorder of the gut characterized by motility and sensation disturbances. The incomplete elucidation of its genesis makes it a fitting candidate for the functional label that precedes its name. Its symptoms include a high sensation of fullness after a meal, early satiety during meals, delayed emptying of the stomach, and pain in the upper abdomen (Talley et al., 1999). Like IBS, functional dyspepsia is marked by altered motility in the gut, particularly the stomach and the upper region of the small intestine called the duodenum, and hypersensitivity noted as upper abdominal pain. In this respect, functional dyspepsia mirrors IBS in all aspects except location. After IBS, functional dyspepsia is the second most common functional disorder of the gut.

Dyspeptic patients can be categorized into three subtypes. The first are plagued with a motility disorder. No sensation of pain in the upper abdomen is perceived by them. Early satiety or abnormal feelings of fullness after a meal are their characteristic symptoms. Consequently, this class of patients experiences their symptoms after a meal. The second subclass has faulty processing of pain. This hypersensitivity is exactly the one noted in IBS patients. A fraction of dyspeptic patients experience both horrors of the subtypes. The extreme sense of fullness or early satiety are in fact gastric (stomach bloating). This discomfort is much like the one experienced by the IBS victim.

In the normal course of process in the average person, the front (proximal) part of the stomach relaxes to accommodate the incoming food. This bulging effect is not entirely the action of the pressure from food but is instead also automatically controlled by the nervous system. This action allows the stomach to accommodate a sizeable meal, making it play the role of a container. In dyspeptic patients, this automatic reflex is impaired. A stiff proximal stomach refuses to relax, narrowing the amount of food the stomach is designed to accommodate. Flaws in the nervous system are to blame for this defect. This causes early satiety and extreme fullness after a meal in a fraction of dyspeptic patients. As was noted earlier, the stomach is not idle but is actively involved in digestion. It churns the food in a rhythmic motion. When this is done, it slowly empties its content into the small intestine. In dyspeptic patients, flaws in the nervous system mean that this churning motion is hampered. Digestion in the stomach therefore takes a significantly longer period, causing delayed emptying of the stomach. Poor accommodation in the stomach causes induction of nausea and vomiting in dyspeptic patients.

It's a common occurrence for a dyspeptic patient to experience both subgroups of dyspepsia.

Previously, the location of pain drew the medical field into a wrong assumption, concluding that functional dyspepsia was similar to gastric ulcer. Eradication of Helicobacter pylori, a bacterium found to cause peptic ulcers, also caused functional dyspepsia in a subset of patients. This seemed to bolster the reasoning that the two ailments were similar. However, noting that eradicating this bacterium did not always improve symptoms, it was learned that functional dyspepsia was a standalone condition caused in certain instances by H. pylori (Talley et al., 1999).

The minor differences between functional dyspepsia and IBS include the location of attack. Functional dyspepsia attacks the stomach and proximal small intestine, whereas IBS attacks the mid and distal parts of the small intestine and large intestine. Similarities in causes can also be noted. Like IBS, functional dyspepsia can also stem from a previously occurring case of diarrhea and food poisoning. Further bolstering the similarities between the two is the observation that containing IBS symptoms simultaneously reverses dyspeptic symptoms in individuals plagued by both ailments (Talley, 2008).

3.2.3 Depression

Traditionally, our approach in the study of body systems veils the fact that there is active communication between different systems of the body. To simplify the narrative, each system, which is already complex enough, is studied alone in detail. While there are positives attributed to this approach, negatives include excluding the role played by other bodily systems acting simultaneously with the system under study. Nowhere is this fact highlighted more than in the gut, a meeting point of major systems. It will be shown in later chapters that the central nervous system wires its circuitry directly into the enteric nervous system (the nervous system designed to rule over motility, sensation, secretion, and absorption in the gut). This union means that the central nervous system is actively involved in the running of the gut despite the presence of a separate and fully developed nervous system in the gut. Communication between the gut and brain is a bi-directional affair. Using this connection, the gut can influence the central nervous system. The opposite is also true. This also means that non-physical factors, like emotions, which are able to shape the central nervous system, are thus able to influence the gut environment by means of the communication between the two systems. While the gut goes about its way directing the movements of contents, digesting food, and absorbing nutrients, another more advanced system residing upstairs casts its hand in the running of the gut. Through this connection, mental states like stress or fear are able to influence the gut. As an example, extreme stress or fear can induce a running stomach in some. A more common example is the “butterflies in the stomach” expression used as a response to anxiety (Mayer, 2011).

Because both systems can communicate, the opposite holds true. The environments in the gut can and do shape our emotions and consequently character. Scientific literature confirming that depression can affect the gut and that flaws in the gut can cause depression confirm the bi-directional cross-talk between these different systems (Foster et al., 2017).

Noting this bidirectional cross-talk, cognitive behavior therapy has been shown to reduce the intensity and severity of symptoms in IBS and the conditions that co-occur with it (Lackner et al., 2018).

However, another cause of depression in IBS patients is not directly involved in the condition but has more secondary origins. The denial of their new norms, i.e., refusing to let go of career paths the victim was passionate about, can be seen as the onset of depression. Indeed, these are big shifts that require plenty of time adjusting once acceptance is made. Hopelessness stemming from fighting intense and recurring symptoms sinks their victim into depression.

3.2.4 Fibromyalgia

Fibromyalgia is the most debilitating chronic pain condition. Its defining symptom, pain, is normally widespread, affecting areas of the body including the skin, muscles, and joints. Migraines and chronic fatigue are commonly noted in fibromyalgia (Clauw, 2014),

Fibromyalgia affects up to 8 percent of the world population and affects more women than men (Wolfe et al., 2018).

Fibromyalgia is a condition characterized by flaws in the processing of pain. Much like the visceral (intestinal) hypersensitivity seen in IBS, fibromyalgia patients have a peripheral sensitization with heightened perception. Pressure applications like touch may be noted as painful, and small intensities of pain are greatly magnified, increasing the intensity of pain perceived.

Conclusion

Irritable bowel syndrome, especially the severe subtype, can be a debilitating condition. The same can be said of the conditions showing a common occurrence with it. Its presence is largely unknown in the average population. Though seemingly simple and without demanding the life of its victim, its impact is huge, affecting the social, financial, emotional, and physical aspects of its victims, threatening to upturn livelihoods.

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