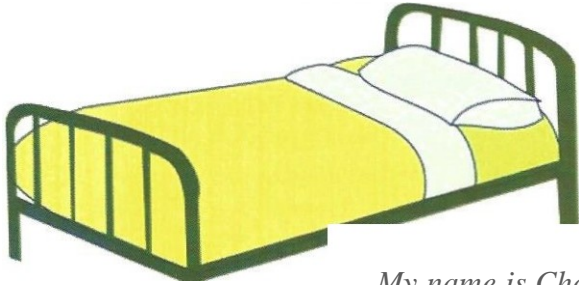


# Treating Bedwetting with the



*My name is Charlotte Meerman and I've been a Bowen Therapist since 2008. I am originally from The Netherlands but live in Bundaberg QLD since 1988 where I have a steadily growing Bowen Therapy practice.*



Bedwetting (also referred to as nocturnal enuresis) is an embarrassing, frustrating and distressing problem that can have a significant impact on a child's self-esteem. It affects approximately: 20-30% of 5 year olds, 8-15% of 7 year olds, 5-7% of 10 year olds and 1-2% of 15 year olds. Even at the age of 18, about 0.5-1% still wet the bed. Gender can also be a factor as it is more common in boys than girls (2 out of 3 bedwetters are boys).

If a child still wets the bed at the age of 6 years or older, parents usually start to become concerned that their child may have some kind of physical or emotional problem. Some decide not to stress about it and give it time while others will seek medical advice, take their child to counselling or use alternative therapies.

Bowen Therapy is a wonderful holistic technique to help children overcome bedwetting as it promotes physical and emotional balance and healing. Although most people have heard of Bowen Therapy, not many are aware that it can also help to treat bedwetting. When parents saw my advertisement in the school newsletter they were very happy to try a different approach to help their child as they

had just about tried everything else. Ten children participated in my research project (6 girls and 4 boys) ranging in age from 6 to 14 years.

There are 3 different types of bedwetting: Primary enuresis (the child is wet every night), intermittent enuresis (the child has occasional dry nights) and secondary enuresis (the child has been dry for months or even years and then starts to wet again, which can be a sign of an underlying medical or emotional problem). Involuntary urination that happens during the day is known as diurnal enuresis and as many as 20% of children who are wet at night also suffer from this. Two of the ten children who participated in my research project had primary enuresis, 7 had intermittent enuresis, 1 secondary enuresis and 3 also had diurnal enuresis.

## Causes of bedwetting:

Bedwetting is a very complex problem which can be caused by emotional, physical and developmental issues. There are many different theories on the cause of bedwetting, but most likely there are several combined factors that cause a child to wet at night.

Every child will have a different combination of these issues and bedwetting needs to be approached with this in mind.

**Deep sleep and sleep disorders:** A bedwetting child who is also a deep sleeper will often not wake up when they have wet the bed. Immaturity of the nervous system is very likely to be the cause of primary enuresis, as the sleep arousal centres of the brain have not yet learnt to recognise messages which are sent by the full bladder. Bedwetting is also frequently seen in children with sleep disorders such as sleep apnoea. This condition can be very disruptive to sleep patterns and is usually caused by enlarged adenoids and tonsils.

**Small bladder size:** Children with small bladders need to empty their bladder more frequently during the day and at night. This, in combination with the child being a deep sleeper, the child usually doesn't wake up from the signal when they need to empty their bladder.

**Anxiety, neuropsychological disorders and emotional stressors:** Stressful events such as divorce, new siblings, moving house, death of a loved one and other traumatic childhood experiences (including

# Bowen Technique - Part I

with Charlotte Meerman, Bundaber, QLD

abuse) may make bedwetting more likely (especially secondary enuresis).

Of course in almost every child's life there is some form of anxiety or stress, so it is important not to label every child who is a bedwetter to have an emotional or psychological issue or to label the parents as bad parents.

Plenty of children are bedwetters without any obvious emotional or psychological problems and live in a loving and stable family. However, parents often find that even small changes to normal routines can make the bedwetting worse.

About 25% of children with Asperger's Syndrome or ADD/ADHD wet at night, which is slightly higher than the general child population.

Family history of bedwetting: If one parent of a child was a bedwetter, their children have a 40% chance of bedwetting and if both parents were bedwetters the chances increase to 75% that their children will wet at night. Genetics, physical traits, personalities and lifestyles are important factors to consider when explaining why bedwetting is more common in certain families. Nine of the ten children who participated in this project had a family history of bedwetting.

Abnormal daytime bowel/bladder habits and constipation: Children who wet during the day (diurnal enuresis) and those with urinary frequency, urgency or constipation are more likely to also suffer from nocturnal enuresis.

Some children hold on to their urine until the bladder is extremely full or wait until it's too late. The brain will learn to ignore the bladder's

signal when it is full, irrespective of whether it's day or night-time. The pelvic floor muscles, bladder and bowel sphincters become very tight holding on to the full bladder and bowel. This can create a 'trigger happy bladder', and therefore even daytime accidents can occur by the urgency problem and not making it to the toilet in time.

When a child is sleeping they are not able to consciously wiggle, squat or run to the toilet when the bladder is very full. Six of the ten children who participated in this research project had daytime bladder and/or bowel problems (especially the girls).

Birth defects and medical conditions: Less than 1% of children with night time wetting have a medical explanation for their problem, such as urinary tract infections, diabetes, seizure disorder, abnormal nerves to the bladder, birth defects, etc.

Insufficient production of antidiuretic hormone (ADH) to slow down urine production at night: ADH (also known as arginine vasopressin) is a hormone secreted from the posterior pituitary gland which regulates the balance of water in the body and causes the kidneys to produce less urine. Studies have shown that some children with nocturnal enuresis do not produce enough ADH at night and produce too much urine while they are asleep, therefore becoming more likely to wet the bed. There are medications available that contain a modified form of the human ADH such as Minirin (desmopressin acetate), which may decrease nocturnal enuresis. However, the current medications prescribed by doctors for bedwetting provide mixed results. There can be side effects and there is no guarantee that it will work.

The body produces too much Prostaglandin and Nitric Oxide (which increases urine production): Some children with nocturnal enuresis have more than 11 times greater than normal Nitric Oxide (NO) levels. These children have also shown to have Prostaglandin levels that are twice that of average levels. A high concentration of NO (a naturally occurring gas in the body) decreases ADH production and as a result nocturnal urine production is increased. Prostaglandin is a hormone-like substance which has a variety of physiological functions, such as metabolism and nerve transmission. It also acts on mesangial cells in the glomerulus of the kidney to increase the flow rate of filtered fluid through the kidney (increased urine production).

Omega-3 fatty acids deficiency: Omega-3 fatty acids play a critical role in the development and function of the central nervous system and may also address a possible root cause of some cases of nocturnal enuresis, namely the delayed development of inhibitory brain pathways. Omega-3 fatty acids have been proven to be beneficial for the development of the area of the brain which controls micturition. They also have the potential to influence bedwetting by inhibition of prostaglandin and renal nitric oxide production. An adequate dietary intake of Omega-3 fatty acids is essential in children who wet at night. Nations with the lowest prevalence of bed-wetting children consume more than double the amount of fish/seafood as compared to the nations with the highest prevalence of bedwetting children. Diet: As recommended by Tom Bowen, children who suffer from bedwetting are advised to avoid dairy products, apples and apple

# Treating Bedwetting with the

juice. A balanced 80/20 diet is also recommended (80% alkaline forming foods and 20% acid forming foods). Soft drinks should be avoided (due to their high sugar content and some contain caffeine such as Cola which can irritate the bladder), and other sugary and/or highly processed foods. It is highly recommended that the child drinks filtered alkaline mineralized water. Alkaline water filtration systems are available in e.g. health food stores.

Delayed integration of primitive reflexes: I noticed in many children whom I have treated for bedwetting (now and in the past) that their lumbar paraspinal s were very reactive and would contract as if in a spasm when I did the first 2 moves of BRM 1 (even though I was using the lightest pressw-e possible), as well as moves 9-16 of BRM 2. Some had this reaction on both sides of the spine and others on only one side. I wondered if there is a reason for this reaction and was very interested to read the theory by John Wilks in his book *The Bowen Technique – The Inside Story*: "Tom Bowen may have been aware of the Spinal Galant reflex (which is one of the primitive reflexes in newborn infants), when he developed the Bedwetting Procedure. This reflex occurs when you stimulate the erector spinae muscles by stroking down the back. The baby will flex the leg and urinate."

Interestingly, if both sides of the spine are stroked simultaneously from the pelvis to the neck, the Pulgar Marx reflex is elicited. "This response involves flexion of both legs, lordosis of the spine, elevation of the pelvis, flexion of the arms, lifting of the head, loud crying culminating in apnoea and cyanosis, emptying of the bladder, and relaxation and bulging of the rectum with bowel movement; after

the reflex has fully developed there is general hypertonia lasting for a few seconds" - Pulgar Marx 1955.

The Spinal Galant reflex emerges at 20 weeks in utero, is actively present at birth, and should be integrated by the time the baby is 6 to 12 months of age. This reflex helps the baby during the birthing process when the mother's contractions stimulate this reflex, causing movements of the baby's hips to enable the baby to work its way down the birth canal. It also allows the foetus to hear and feel the sound vibrations in the womb. The Spinal Galant reflex is important in the development of hearing and auditory processing, as well as helping to achieve balance when the child is creeping and crawling. Unintegrated, active primitive reflexes may be caused by stress of the mother and/or baby during pregnancy or complications at birth that prevented the foetus to use this reflex to manoeuvre itself through the birth canal (e.g. breech birth, premature birth, induced birth, caesarean birth, forceps or vacuum assisted delivery). The mothers of five of the ten children who participated in my research reported that they had in fact complications during gestation and/or delivery. Lack of enough proper movement in infancy may also be a factor as this restricts critical movements required for brain development, e.g. being left for long periods of time in baby walkers, baby capsules or bouncers. In some cases, reflexes that are completely integrated can become reactive at a later stage because of illness, trauma, injury, chronic stress, environmental toxins, complications with vaccinations, dietary imbalances or sensitivities. A retained or residual Spinal Galant reflex is found in a high percentage of children over the age of 5 years with nocturnal enuresis.

If the Spinal Galant reflex is not integrated within the first year of life, it can be elicited by light pressure in the lumbar region and those children often do not like wearing belts, elastic waistbands or labels inside the waistband as the friction activates the reflex. They may also dislike having their backs rubbed or an arm around their waist. Some have a preference for sitting on a stool, or refuse to sit back in their chair. The possible long term effects of a retained spinal Galant reflex include: Bedwetting, bowel control issues, difficulty sitting still (often described as "ants in the pants"), hyperactivity, poor listening skills, poor speech development, fatigue, poor concentration, poor coordination, extreme ticklishness (especially around the back), poor short term memory, hip rotation to one side when walking, poor posture, scoliosis and attention difficulties.



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Fern Ridge Press  
Source: *Reflexes, learning and  
behavior*  
by Sally Goddard Blythe

# Bowen Technique - Part I cont.

Children with ADD/ADHD, auditory processing disorders, autism or Asperger's Syndrome often have a retained Spinal Galant reflex (as well as other retained primitive reflexes such as the Moro reflex and asymmetrical tonic neck reflex). Two of the ten children who participated in my research project have Asperger's Syndrome and one has ADD. These children all had very reactive lumbar paraspinals.

Primitive reflexes emerge from very early in-utero and are essential for survival in the first few months of life. These reflexes are directed from the brain stem and are automatic, stereotyped movements which provide the training platform for many aspects of later functioning. The brain stem connects the cerebral cortex with the spinal cord and is the most primitive part of the brain which controls life supporting autonomic functions of the peripheral nervous system. The primitive reflexes transition into more complex, voluntary-based movement patterns when they are inhibited by the higher centres of the brain within the cerebral cortex. This process allows for the development of more

sophisticated neural structures which then allow an infant control of intentional response.

The voluntary control of micturition (urination) usually develops by the age of 3-5 years, but if primitive reflexes remain active, the neural structures of the higher brain centres which inhibit micturition cannot fully develop. If the autonomic nervous system is dominant over the somatic nervous system, we are not able to easily access our prefrontal cortex, the higher centre of the brain where we can process and analyse information. Instead we remain in survival and stress mode. As a child grows up, the unintegrated reflexes trigger the fight/flight response even when there is no logical reason for the stress, so over time this becomes a common pattern of responding, even into adulthood.

The Bedwetting procedure may assist in integration of the Spinal Galant reflex because of the combination of the holding points whilst performing the move over the coccyx. Bowen moves activate proprioceptors at multiple tissue levels and create a dynamic re-

arrangement of the central and peripheral nervous systems, regulating the autonomic nervous system and therefore facilitating the neural pathway to the prefrontal cortex, especially procedures that involve areas such as the TMJ, respiratory, kidney and coccyx.

Neuro-Developmental Therapists use remediation techniques with special exercises to integrate retained primitive reflexes. These exercises stimulate connection of neural pathways to the brain that allow for development of more complex and refined reflexes, by repeating similar movements that should naturally occur in the first year of life. Referral to a Neuro-Developmental Therapist is highly recommended for children with nocturnal enuresis, especially if there is no improvement after several Bowen treatments.

*Results of the Bowen Therapy treatments of the children who participated in this research project will follow in part II in our next issue.*



*Instructor Antonios Xiroudakis far right with his Module 7 Class in Crete: - Dorina Tataraki, Kallia Tsiaki, Marina*



# Treating Bedwetting with the



*My name is Charlotte Meerman and I've been a Bowen Therapist since 2008. I am originally from The Netherlands but live in Bundaberg QLD since 1988 where I have a steadily growing Bowen Therapy practice.*

Bedwetting is a very complex problem which can be caused by emotional, physical and developmental issues. As mentioned in Part I of this article, there are many different theories on the cause of bedwetting which include sleep disorders, immaturity of the nervous system, small bladder size, diet, anxiety, emotional stressors, neuropsychological disorders, genetics, abnormal bowel/bladder habits, hormonal and chemical imbalances/deficiencies, birth defects, medical conditions and delayed integration of primitive reflexes. In most cases there are several combined factors that cause a child to wet at night. Even though it can be difficult to determine the exact combination of factors involved in a child's bedwetting problem, their body will know what to do with the Bowen moves and will utilise these as needed. The holistic approach of the Bowen Technique can be very effective to heal the underlying physical, chemical and emotional causes of this condition.

Ten children participated in my research project (6 girls and 4 boys) ranging in age from 6 to 14 years. They all loved their Bowen

treatments and some even said they wish they could come more often than just once a week. The parents of all participants had already tried a variety of bedwetting treatment methods but with only some or no results. These methods included fluid restriction, waking the child up during the night to take them to the toilet, bedwetting alarm, rewards, medication and counselling.

Prior to the first appointment I sent the parents a questionnaire and asked them to complete that and return it to me before the first session. It includes questions about the child's sleep patterns, toilet habits, bedwetting history, family history, gestation period and birth, medical history, previous methods they have tried to stop the bedwetting, etc. In some cases I contacted the parents before the first appointment to discuss some of their answers on the questionnaire, as it is a sensitive issue and it is sometimes more appropriate to discuss these things without the child being present. I also sent the parents a handout with guidelines on managing the bedwetting. It contains general information about bedwetting,

advice regarding the child's diet and explains that it will require patience, commitment and a positive approach to help the child and not to get angry or show frustration when the child has an accident at night. Parents should always remember it is not the child's fault and it would be very rare for a child to deliberately wet their bed. Bedwetting is something children do not know how to correct themselves so they need support and reassurance and should never be made to feel embarrassed, ashamed or responsible for the bedwetting.

At the first session I first sit down for a consultation with the child and preferably both parents to get to know them and their specific circumstances. As bedwetting is a very embarrassing and distressing problem, I make sure that the children are comfortable and willing to have the treatment and tell them that bedwetting is nothing to be ashamed of or to feel guilty about. They are not alone because every night millions of kids around the world of the same age wet their bed and e.g. in a 7 year old child's class there would be at least 4 to 7 other kids who wet the bed

# Bowen Technique - Part 2

with Charlotte Meerman, Bundaberg, QLD

as well. I also mention to them that almost all kids will eventually grow out of it but that Bowen Therapy can help to make this happen sooner.

Every time I work with children, I am in awe of how their bodies respond to a minimum of work being done. Their body language tells us when they are ready for the next set of moves or if their body has had enough. Children are always very good at noticing the sensations in their bodies which are created by the Bowen moves, because they are so open and new to this experience without any prejudice. They often say that they feel 'waves' or 'butterflies' going through their body.

The most common Bowen procedure we use for nocturnal enuresis is the Bedwetting Procedure. After moves 1 and 2 of BRM 1, the first move over the centre of the coccyx is the same as the Coccyx Procedure but two extra holding points are used on the erector spinae on the top of the iliac crests. The third holding point (which is also used in the Coccyx Procedure) is immediately inferior to the inferolateral angle of the sacrum which corresponds with acupoints that are also used in other modalities to treat urinary dysfunctions and bedwetting.

I always get the parents to assist with the holding points on the erector spinae for the Bedwetting procedure, and some were surprised when they felt a 'wave' or 'pulse' when I did the move on the child's coccyx.

John Wilks wrote in his book *The Bowen Technique – The Inside Story*: "The coccyx is a

crucial area for balancing the autonomic nervous system. Both the sympathetic and parasympathetic nervous systems have important ganglia and nerve pathways that go close to the coccyx. The sympathetic nervous system consists of a chain of very fine nerves which run down either side of the spine from controlling nuclei in the brain stem. These two chains have an important junction at the top of the coccyx called the ganglion or impar (or imperial ganglion). The parasympathetic system also has nerve pathways which originate close to the coccyx and control the bladder, lower bowel and reproductive systems. All these parts rely on a perfect balance to work properly and there is no doubt that the coccyx procedure helps in this. For example, control of the bladder is mediated by the sympathetic nerves which allow the bladder to hold on when there is no toilet in sight on the M25, whilst the parasympathetic nerve supply allows urination. The coccyx is the only place in the body where the three layers of membrane that surround the brain and spinal cord (the dura, arachnoid and pia) come together. The first move of the coccyx procedure moves right over this and sends an impulse all the way up the spinal cord to the anterior attachment of the dura at the ethmoid" (just between and above the eyes).

Tom Bowen used to say that the second move of the Bedwetting Procedure which is done on the rectus abdominis fascia 'locked in' the first move. This move is done in a 'boomerang' shape midway between the umbilicus

and the midpoint of the inguinal crease which is innervated by T10 - T12. The sympathetic nerves which innervate the bladder and internal sphincter also originate from T10 - L2. It is interesting that these areas originate from the same level in the spine. It also corresponds with an internal kidney meridian trajectory.

When children come for their first session, I usually do all the BRMs, Kidney and often also Respiratory to balance and relax their body and prepare them for the Bedwetting treatments which then follow in the subsequent weeks. The Kidney procedure is essential when treating any kidney/bladder issues. It stimulates the kidneys, and brings energy into the bladder area and the nerves which innervate these structures. Kidneys are associated with fear so the Kidney procedure is very useful when children have emotional issues. The Respiratory procedure is also very important as it addresses stress or anxiety.

The next four weekly sessions I only do BRM 1 (moves 1 & 2) and the Bedwetting procedure, alternating between the left and right side every week. If the child hasn't responded after several treatments or only minimal changes have been achieved, I often use other procedures by that stage, such as specialised Bowen procedures Coccyx Oblique or Gracilis which stimulate nerves that innervate the bladder. These moves also correspond with the kidney and bladder meridians.

Other procedures to consider (not all in the same session):

# Treating Bedwetting with the

Gallbladder procedure - essential when treating children for nocturnal enuresis who also suffer from a bowel problem as these issues can be related. This procedure is also effective for emotional issues and in such cases the Shoulder procedure may be added. The Knee and Ankle procedures coincide with bladder and kidney meridians so can be effective in treating bedwetting as well. The Upper Respiratory/TMJ and Additional TMJ procedures which stimulate the vagus nerve may be useful in some children with nocturnal enuresis who haven't responded to the Bedwetting procedure. Vagus nerve branches represent most of the cranial component of the parasympathetic division of the autonomic nervous system. If the sympathetic nervous system dominates, it can cause an excessive activation of the vagus nerve (especially due to physical or emotional stress). This results in parasympathetic overcompensation which can affect bladder control. The Bowen Technique calms the sympathetic nervous system so the parasympathetic system will no longer need to compensate and therefore bladder agitation is

reduced.

The first one or two months I get children to see me once a week. After that the treatments usually can be reduced to every two weeks or longer intervals. If there is good progress, they come back once a month for review and maintenance treatments as needed. If four weeks of bedwetting treatments with Bowen Therapy do not result in a reduction of the bedwetting frequency or any change in the bedwetting pattern, there may

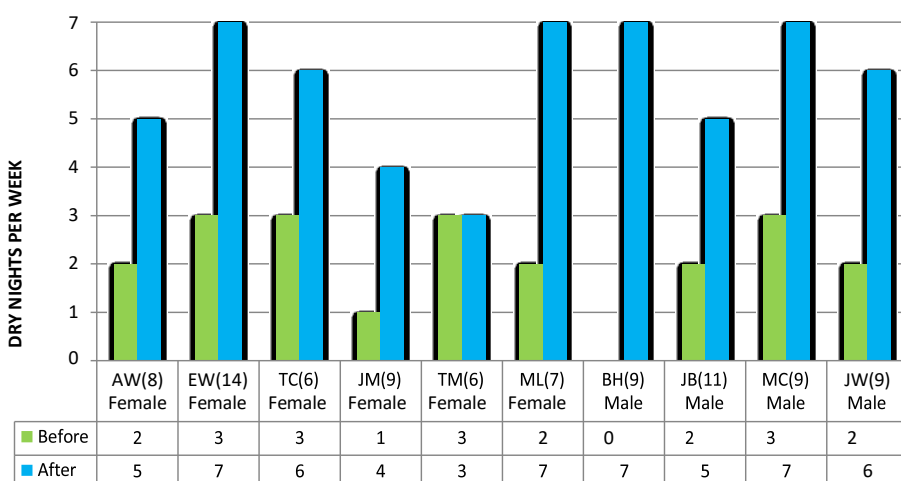
be an underlying medical or emotional issue that needs to be investigated by an appropriate professional and referral for further investigation by a Paediatrician and/or Counsellor would be recommended in those cases.

One of the participants was a seven year old girl with ADD, anxiety issues, constipation, faecal incontinence, diurnal and nocturnal enuresis, eczema and many allergies. She used to wet her bed almost every night but improved significantly after her Bowen treatments. She first had 3 dry nights, then 6 and eventually 100% dry nights after 8 sessions. In the first session I used the BRMs, Kidney and Respiratory and in the following weeks the Bedwetting Procedure. In the 6th and 7th session I used BRM 1 moves 1 & 2 and Coccyx Oblique, seeing she also had bowel issues. In the 8th session I did all BRM's, Kidney, Respiratory, Gallbladder, Knee, Upper Respiratory and TMJ. Her knees were extremely tight and also the sternocleidomastoid and TMJ. She was very ticklish around the

knee area so I got her to hold on to my arm which helped a lot. After the knee procedure she felt a lot of tingling around her bottom so we waited for that to subside. After I did the TMJ, she said it started to feel like a 'hard pulling' sensation on her chin. It continued to feel like that for 15 minutes so I let her rest while we waited for the sensation to go away. When she got up she was fine and very calm. Bowen therapy has not only helped her to become dry at night, but it has also helped her in many other ways. She has become happier, calmer and less anxious and to her Paediatrician's amazement, after years of severe allergies, all her food and animal allergy tests were negative when she had been to Brisbane for a check-up.

Qualitative and quantitative methods were used in collecting data for this research project. For the quantitative component I kept a record of the number of dry nights the children had each week. For the qualitative component I asked the parents to complete a questionnaire with their child at every appointment.

**Summary of All Cases**  
Average Dry Nights Per Week - Before and after Bowen therapy





# Bowen Technique - Part 2 cont.

Nine of the ten participants had an improvement in the number of dry nights. Four became 100% dry, two were dry almost every night and two others were dry on average five nights a week. One female participant has had some improvement but her sister still has the same average wet nights per week as before. These two sisters have not been able to come to me to have regular weekly treatments and also suffer from coeliac disease which may be a factor in their results. They have been referred back to their doctor.

The Bowen Therapy treatments also had a profound effect in other ways. Five of the ten children settled down to sleep much earlier than they used to. Others started to wake up and go to the toilet themselves during the night, which they had never done before, which is a sign the brain is starting

to respond to the bladder's cues when it's full. Anxiety and moodiness also reduced in several children. Some parents observed emotional releases, improved concentration and calmer behaviour in their children. The children have become more confident and positive since they started to become dry at night. The excited big smiles on their faces when they tell me how many more dry nights they had every week is extremely rewarding! I got to know the children and their parents very well since they started coming to see me and they have referred many new clients to me.

A testimonial by one of the parents after a couple of treatments:

*"A big thank you to Charlotte Meerman at Bowen Worx - Bowen Therapy, you have*

*changed my life and my little man's. I can see the improvements already. He has been a wetter at night for a long time, never gets up to go to the toilet during the night. I was shocked two nights in a row, when I woke up and he had left the light on in the toilet and the hallway because he had been up. It's a MIRACLE, we have tried everything else that we're supposed to do.*

*Everyone, BOWEN WORX, I mean, it works."*

Emma W. Bundaberg QLD

## Qualitative Outcome in Project Participants

Initials & Age	TM	JM	TC	ML	EW	AW	MC	JB	BH	JW
	6	9	6	7	14	8	9	11	9	9
Improved Sleep	✓	✓		✓	✓	✓				
Waking Up & Going to Toilet Themselves							✓	✓	✓	✓
Improved Concentration	✓			✓		✓				
Calmer Behaviour				✓		✓				
Improved Behaviour						✓				
Less Moody					✓	✓				
Reduced Anxiety			✓	✓		✓				
Reduction in Allergies				✓						
Emotional Releases	✓	✓		✓	✓					

information handout for parents, etc.) you can email me: [bowenworx@optusnet.com.au](mailto:bowenworx@optusnet.com.au)