

## **OBD Triage Assessment Model**

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### Organic Brain Dysfunction

#### *A Screening Instrument for use in the Medical Evaluation of Teratogenic Effects on Embryonic Development © 1998 –2009*

Medical research has established that not all individuals who have been exposed to alcohol insult *in utero* are necessarily affected. (Spohr, Steinhausen, 1996). However, those who have been affected present challenges unique to themselves, their families and their communities (Clarren, Streissguth, 1997). This would include service provision issues specific to systems such as Health Care, Education, Social Services and Justice Agencies. In order to warrant a medical evaluation to determine the possibility of Fetal Alcohol Spectrum Disorders, four criteria must be met:

- 1) Confirmation of maternal ingestion of alcohol (drugs) during pregnancy and/or evaluation of statistical inference indicators based on established research findings.
- 2) Physical anomalies including sentinel craniofacial features, growth delay, dysmorphic physical findings and medical issues found more commonly in patients prenatally exposed to alcohol and/or drugs).
- 3) Neurodevelopmental deficits and/or skewed learning patterns.
- 4) Persistent behavioral issues medically documented to occur more frequently in alcohol exposed children, youth and adults.

#### *The goals of the **OBD Triage Assessment Model** are to:*

- Ensure diagnostic physicians have accurate, relevant and reliable information gathered by a trained professional.
- Investigate genetic load factors, nutritional and health status, physical injury to the mother (fetus) and other teratogenic possibilities that may compromise fetal development and outcomes to be provided for the diagnostic physician's analysis and evaluation.
- Elevate the current standard of screening and enhance diagnostic outcomes. The **OBD** Instrument contains updated physical diagnostic anomalies and is designed to catch those individuals who do not meet previous criteria standards but upon evaluation, have received a confirmed diagnosis.
- Reduce the incidence of inappropriate referrals for medical evaluation.

- Present biological mothers with appropriate and sensitive support in pre and post screening stages of assessment in order to augment provision of information and address prevention issues.
- Protect biological mother's health history and disclosure of maternal ingestion information.
- Provide children, youth and adults involved with community and Children's Services agencies with a detailed, precise chronological history including social, hereditary, medical, cognitive and behavioural issues and appropriate service referrals pending medical evaluation.
- Acknowledge and respect cultural variables in all areas of assessment.
- Include secondary disabilities and co-occurring issues such as addictions, physical health, mental health, birth control, placement and service delivery.
- Investigate the possibility of alcohol-related disabilities in multi-generations.
- Assess academic achievement, executive functioning, abstract reasoning, memory, communication skills, Attention Deficit/Hyperactivity Disorder and adaptive behaviour and socialization by review of standard tests, teacher and caregiver participation.
- Consider legal issues pertinent to FASD issues.
- Collect Canadian content and global data (statistics) available for use in further research, policy planning and prevention strategies.
- Act as the key component for use in Tele-Medicine assessment and diagnosis for rural and isolated areas.

A Registry of [OBD](#) Triage Certified Clinical Examiners has been established to ensure the integrity of the documentation. (Pre-screening of academic credentials, confirmation of good standing with the respective professional association and experience in FASD is mandatory).

[OBD](#) Triage Clinical Examiners are of graduate studies educational status in the areas of Nursing, Social Work, Psychology, Education, Rehabilitation, Mental Health and/or related disciplines. (FASD Clinic-employed undergraduates may be considered if sponsored by the respective clinic). Extensive training (2-day classroom certification program) in Fetal Alcohol Spectrum Disorders, duplication syndromes, Neonatal Abstinence Syndrome and comprehensive instruction in utilization of the instrument and manual are provided and are compulsory for application of the [OBD](#) Triage Assessment

Model. Particular attention is directed towards interview techniques required to ensure the non-judgmental and supportive procurement of maternal ingestion history prior to, during and post pregnancy as well as related legal, social and cognitive ramifications.

## **Process**

The **OBD** Triage Assessment process involves the retrieval and pre-screening of medical documentation including pregnancy and birth records, hospital records, academic reports, cognitive testing, current Teacher's Checklist, Psychological/Psychiatric assessments, Child Welfare records, adoption documentation and Court reports. This data is obtained by direct interviews within the community (home visitation if possible) with the biological parent(s), caregivers and patients and is to be held accountable to ethical and legislative standards and within the strict guidelines of confidentiality. The **OBD** Triage Instrument is available for assessment of all age groups from birth to adults.

This model is intended to *pre-screen only* for the possibility of Fetal Alcohol Spectrum Disorders **as well as** other medical issues that could be caused by teratogenic factors, including genetic syndromes and the potential relationship possibilities for fetal damage and subsequent cognitive impairment including Fetal Hydantoin, Fetal Anticonvulsant, Fetal Valproate, Maternal (phenylketonuria) PKU Fetal Effects, Toluene embryopathy, DNA mutations and various syndromes including Aarskog, Noonan, Dubowitz, Corneila deLange, Opitz, Williams and Turner. Assessment outcomes are not opinion based, but determined on whether the child, youth or adult meets the medical criteria specified in the **OBD** Triage Code in order to warrant further investigation. It includes teratogenic possibilities such as lead, infection, virus, poor maternal nutritional status, prescription medications, illicit drugs, herbal medications as well as screens for other concerns such as physical injury to the mother/fetus, bulimia/anorexia, hereditary possibilities and sub-optimal postnatal environment issues. Other areas for consideration include:

Poor postnatal stimulation and/or nutrition, social history, emotional neglect, physical abuse, sexual abuse, domestic violence, exposure to inappropriate use of alcohol &/or drugs by the parent(s) or caregivers, multiple placement moves, mental health of parent(s) and adoption disruptions.

The **OBD** Instrument provides the diagnostic physician with a **Physician's Checklist** that was developed to expedite the medical evaluation procedure as it contains potential medical issues (243) that have been identified in the medical literature and some that have become more recently identified, such as rhizomelic shortening and subdural hygroma's. Thorough investigation may reveal whether there are discrepancies in the data at a glance. For example, a birth parent may have indicated that there were no complications at birth, however review of medical documentation by the Clinical Examiner reveals that there were major complications that were related to Neonatal Abstinence Syndrome. This presents the physician with valuable information in

formulating an accurate diagnosis and suggests that there is a possibility that the provider of the information may be considered an unreliable historian, which requires further investigation. (Low functioning capacity and possible memory deficits or that they are not able to be truthful due to other circumstances, such as an upcoming Court hearing).

The instrument also examines secondary issues with regards to the patient such as mental health and substance abuse. If evident, appropriate referrals and intervention (treatment programs) may be recommended by the Diagnostic Clinic Team, taking into account the individual's overall executive functioning capacity, current supervision and residential support as cited in the Triage Instrument.

The [OBD](#) Triage model investigates the possibility that the biological parent(s) may be alcohol affected, which may impact disclosure of information and parenting abilities and is instrumental in the decision making process (often of custody and/or permanent guardianship of a child or children). Once the [OBD](#) Triage Assessment is completed, medical evaluation, alternative interventions and support services, including financial assistance in some cases Assured Income for the Severely Handicapped (AISH) and Persons with Developmental Disabilities programs may be recommended for the patient and/or biological parent(s).

The model evaluates the possibility that a care provider may unwittingly attempt to skew the assessment results as they may have a predetermined notion of the diagnosis, or conversely, may have a personal investment in the child not having a diagnosis of Fetal Alcohol Spectrum Disorders. For example, a caregiver who is struggling with the child's persistent behaviors and not is receiving the appropriate respite or special rates for medical disability. Although they may want to keep the child long-term, they may be fearful of financial stress without a confirmed diagnosis. In contrast, a biological mother whose children have been taken into the care of Social Services and in anticipation of a court hearing to decide custody, may be ambivalent to disclose accurate information for fear of losing her children. False positives and negatives are possible in all interview areas, including parents (caregivers) and professional groups. It should be noted that in the event this does occur, it is most probably due to misinformation regarding various disabilities in addition to Fetal Alcohol Spectrum Disorder.

The [OBD](#) model addresses Canadian Health Act regulations and confidentiality concerning the health and obstetrical history of the biological mother. For example, the number of abortions is pertinent information for the diagnostic physician, however this data **is not** to be revealed in the [OBD Triage Summary Report](#). Unfortunately there have been examples of confidential documents mistakenly or inappropriately being released by Child Welfare agencies, well meaning caregivers and legal representatives, particularly in criminal defence cases. The [OBD Triage Summary Report](#) will indicate whether there is a positive screen for *any type* of teratogenic concern, not specifically alcohol and/or drugs in keeping with confidentiality guidelines while improving the

exactitude of disclosure outcomes. They are also standardized to maintain consistency. A copy of the [OBD Triage Summary Report](#) is also forwarded with the [OBD Instrument](#) to the diagnostic physician.

The reports include: (Full [OBD Triage Summary Report](#) text example available by request).

### **Teratogen Screen:**

Teratogen – anything that adversely affects normal cellular development in the embryo or fetus. Taber’s cyclopedic medical dictionary – Edition 19, page 2152.

The investigation of potential teratogens that may compromise fetal development includes the exploration and identification of the following teratogenic possibilities as cited in the [OBD Triage Model](#) ©:

Radiation, lead, herbicides, x-rays, infection(s), virus, German measles, pre-existing medical conditions, genetic issues, DNA mutations, cigarette smoke, alcohol, prescription medications, illicit substances, toxic non-beverage substances.

Other areas that are explored are: high blood pressure, hyperthyroidism, anaemia, bulimia, anorexia, physical injury to the mother (fetus), inadequate nutritional status, stress, over the counter and/or herbal medications and adverse postnatal complications.

### **Legal Issues**

The [OBD Triage Assessment Model](#) assures that **Consent for Release of Information** forms are provided and completed properly, reducing liability to the Examiner/Physician and/or Diagnostic Clinic. For example, a biological mother in recovery may have disclosed information regarding her ingestion of alcohol in her pregnancy. One year later, she relapses in recovery and attempts to sue the diagnostic physician stating that she did not drink in the pregnancy and that the diagnosis is slanderous. The initial signed Consent for Release of Information form may prove critical in dismissing further complications. Further, the Clinical Examiner is trained to carefully investigate and assess the reliability of second or third hand disclosure of maternal alcohol ingestion which is critical to establishing an accurate diagnosis.

Criminal defence in Youth and/or Adult Court involves not only the possibility of a potential or existing diagnosis but more importantly, assesses the individual's *overall* functioning capacity and suitable recommendations for appropriate sentencing based on the individual's respective disability. For example, with a youth charged with inappropriate touching of a small child, once assessed, it may be discovered that the particular youth is emotionally and socially functioning at a six-year old developmental

level in this area, which would be critical information with regards to sentencing recommendations and treatment design.

**OBD** Triage model is utilized in avoiding various legal situations involving pre and post adoptions and there appears to be a substantial rate of adoption disruptions for families with undiagnosed alcohol related disabilities. In the event that a family was not told of any possibility of pre-existing medical disposition such as alcohol-related disabilities or that the child was never medically evaluated, a lawsuit citing non-disclosure of information may be deliberated.

Family Court decisions intended to determine custody of a child or children may evoke several questions as to 1) the parent's ability to provide appropriate supervision, potential modifications to the home environment and special services as indicated by the evaluation process 2) to revoke an adoptive parent's legal guardianship in order to provide out of home placement and support services due to the organic brain injury, which habitually translates to behaviours (although they have proved to be very effective parents). This has been a concern in cases where adoptive parents have been held responsible by the Courts for the actions of their child. It is probable that an affected individual's actions may have been as a direct result of brain damage due to alcohol insult *in utero* and **not** due to ineffectual parenting.

### **The **OBD** Triage Assessment Model improves cost effectiveness:**

Medical evaluations are quite costly and may be unnecessary if 1) the child, youth or adult does not meet the criteria to warrant further investigation and 2) where a diagnosis of Fetal Alcohol Spectrum Disorders has already been medically established. The occurrence of a pre-existing diagnosis has been discovered while implementing the **OBD** Triage Assessment, which facilitated the requirement that the Examiner is to be in receipt and review all medical documentation *prior* to initiating interviews. In situations where the Clinical Examiner discovers that a previous diagnosis has been established, they are to discuss with the diagnostic physician as to whether an updated evaluation is required and provide the requestor of the assessment with a brief, written summary of description of diagnosis. Diagnostic Interpretation of Abilities Reports provide an explanation of the specific brain dysfunction and recommendations based on the individual's functional capacity are completed in the event the diagnosis has been established.

The model enables the Physician and/or Clinic, referral source (such as the Courts) and Child Welfare agencies the opportunity to monitor diagnostic outcomes and accessibility of required support services for child, youth, adults and their caregivers. This information is useful, in investigating whether recommended medical evaluations were in fact completed and indicate which support services were made available to the individual and caregivers. It further provides a review of whether those support services

were effective in alleviating stress for the patient and family, reducing the incidence of inappropriate behaviour and identifies strengths and accomplishments in all areas of the patient's life course.

**OBD** Triage Institute Data Bank records statistics of all age levels of the model, creating the ability to cross correlate relevant Canadian content data. This information is available for local & global research in all areas concerning Fetal Alcohol Spectrum Disorders as well as other related medical and/or social conditions and can be conducted at the respective facility site. The Clinical Examiners are responsible for entering this anonymous and consent applied data directly to the **OBD** Triage Data bank on a regular basis.

For further information regarding the **OBD** Triage Institute and/or **OBD** Triage Instrument Training, please contact:

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