

Πρόγραμμα Μεταπτυχιακών Σπουδών Εξειδίκευσης
του Τμήματος Ελληνικής Φιλολογίας του Δημοκριτείου Πανεπιστημίου Θράκης
σε συνεργασία με το
ΕΚΕΦΕ Δημόκριτος – Ινστιτούτο Πληροφορικής και Τηλεπικοινωνιών
με τίτλο: «Εξειδίκευση στις Τ.Π.Ε. και Ειδική Αγωγή – Ψυχοπαιδαγωγική της ένταξης»

ΑΝΟΡΓΑΝΕΣ ΧΗΜΙΚΕΣ ΟΥΣΙΕΣ ΚΑΙ ΑΥΤΙΣΜΟΣ

INORGANIC CHEMICAL COMPOUNDS AND AUTISM

του

Γκουγκουλάκη Χρήστου

Μεταπτυχιακή διατριβή που υποβάλλεται
Στην τριμελή επιτροπή για την απόκτηση του μεταπτυχιακού τίτλου του
Προγράμματος Μεταπτυχιακών Σπουδών Εξειδίκευσης
Του Τ.Ε.Φ-Δ.Π.Θ. σε συνεργασία με το Ε.Κ.Ε.Φ.Ε. Δημόκριτος – Ινστιτούτο
Πληροφορικής και Επικοινωνιών
Με τίτλο: «Εξειδίκευση στις Τ.Π.Ε. και Ειδική Αγωγή – Ψυχοπαιδαγωγική της
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ΠΕΡΙΛΗΨΗ

Η διαταραχή αυτιστικού φάσματος (ΔΑΦ) αποτελεί μια νευροαναπτυξιακή διαταραχή όπου στις ημέρες μας καταγράφει συνεχή και ταχεία αύξηση στον επιπολασμό της. Η παρατηρούμενη αυτή αύξηση, σε συνδυασμό με τους άγνωστους παράγοντες που την προκαλούν, έχει στρέψει το ενδιαφέρον αρκετών επιστημόνων στην διερεύνησή της. Θα μπορούσε να χαρακτηριστεί ως μια πολυπαραγοντική διαταραχή. Παράγοντες οι οποίοι έχουν εμπλακεί, από έρευνες που πραγματοποιούνται τις τελευταίες κυρίως δεκαετίες, είναι περιβαλλοντικοί, χημικοί, γενετικοί, κληρονομικοί και βιολογικοί. Στην παρούσα βιβλιογραφική ανασκόπηση εξετάζουμε την πιθανή συσχέτιση μεταξύ κάποιων ανόργανων χημικών ουσιών και της διαταραχής αυτιστικού φάσματος. Οι ανόργανες αυτές χημικές ουσίες ανήκουν στις κατηγορίες των βαρέων μετάλλων, των ιχνοστοιχείων και των ατμοσφαιρικών ρύπων. Ιδιαίτερη αναφορά γίνεται για τα στοιχεία του υδραργύρου, του μολύβδου, του αρσενικού, του καδμίου και του χρωμίου, καθώς παρουσιάζουν εξαιρετικό επιστημονικό ενδιαφέρον όσον αφορά το υπό μελέτη θέμα. Ένα πλήθος δημοσιευμένων ερευνών φαίνεται να τείνει προς μία θετική συσχέτιση μεταξύ των επικίνδυνων χημικών ουσιών και της διαταραχής αυτιστικού φάσματος. Για το μέλλον φαίνεται σαφές πως απαιτείται πρόσθετη εστιασμένη έρευνα.

περιόδων αναπτυξιακής ευαισθησίας είναι υψίστης σημασίας για την κατανόηση του πότε και υπό ποιες συνθήκες ένα παιδί διατρέχει αυξημένο κίνδυνο για αυτισμό. Κανένας περιβαλλοντικός παράγοντας από μόνος του δεν εξηγεί την αύξηση στον επιπολασμό του αυτισμού. Ενώ έχουν προταθεί κάποιοι περιβαλλοντικοί παράγοντες κινδύνου βάσει δεδομένων από μελέτες σε ανθρώπους και από ζωικά πειραματικά μοντέλα, είναι σαφές ότι πολλοί περισσότεροι, και ίσως οι πιο σημαντικοί παράγοντες κινδύνου, μένει ακόμα να προσδιοριστούν. Ωστόσο, ο ρυθμός με τον οποίο οι παράγοντες περιβαλλοντικού κινδύνου για τον αυτισμό έχουν προσδιοριστεί μέσω έρευνας και ασφαλών δοκιμών, δεν συμβαδίζει με την αναδυόμενη απειλή για την υγεία που δημιουργεί η ραγδαία αύξηση στον επιπολασμό της διαταραχής. Για το μέλλον φαίνεται σαφές πως απαιτείται πρόσθετη εστιασμένη έρευνα. Άλλα το πιο σημαντικό είναι το ότι οι επιτυχημένες στρατηγικές μείωσης του κινδύνου για τον αυτισμό θα απαιτήσουν πιο εκτεταμένες και πιο εξειδικευμένες αναπτυξιακές δοκιμές ασφαλείας των χημικών ουσιών που παράγονται και χρησιμοποιούνται από τον άνθρωπο (Dietert, Dietert & DeWitt, 2011).

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